

AUTHENTIC

No.
31

SCIENCE FICTION MONTHLY 1'6

Full
Length
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Short Story
by:
E. Everett
Evans
Serial by
S. J. Bounds
Features by:
W. F.
Temple
and
F. J.
Ackerman
Also:
Readers'
Letters
Science
Fiction
Dictionary
News and
Reviews
Illustrated



AUTHENTIC

SCIENCE FICTION MONTHLY

VOL. I. No. 31

ONE SHILLING AND SIXPENCE

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Back Cover Plate

"Dream of
the Stars"

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by CHARLES L. HARNESS.....4

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H. J. CAMPBELL'S PAGE

Some of you seem to have got it all wrong. The word has gone around here and there that we are now printing only short stories. We are not doing anything of the kind. In each and every issue since *Authentic* began life two years ago there has been a long novel. And that is the way it is going to be in future, too.

What we have done is to give you a lot more pages for nothing and to fill those pages with short stories. As we said before, it's a kind of gift from the publishers to help British science fiction along the road to world-wide recognition as a literary form.

And in this issue we give you, by the grace of Charles L. Harness, one of the finest science-fiction novels yet to see print. This will very shortly appear as a hard-cover book in America and we are pleased and proud to give you this preview. Arthur C. Clarke believes Harness has an original mind. We think you will all agree when you have read this lyrical, nostalgic, brilliant novel—*The Rose*. It is all I can do to stop myself calling it colossal!

E. Everett Evans' *Never Been Kissed* is in a lighter vein. It's a new way of looking at man's outpost on Mars. New and intriguing. I hope you like it.

This issue sees the end of our serial. Many of you, from what you say in your letters, will be

glad. Not so much because you don't like the story—lots of you do—but because you hate serials. You just can't wait, it seems, a whole month before finding out what happens next. Well, as always, we bow to your decisions. No more serials.

Instead, the next issue will contain at least three short stories in addition to the long novel. One is by Rick Conroy, entitled *Manna from Heaven*. Rick is a discovery of ours and we know that you will enjoy this story by the author of *Martians in a Frozen World* and *Million from Mars*. Here again, we are acceding to your request for stories by former *Authentic* authors.

There are other things, too. Letters commenting on our January issue made several collective points about our layout and cover design. You will see that the changes have been made in this issue.

This issue, too, contains the first starred letter on our Projectiles page. Six non-fiction books have gone off to Mr. Rattigan as an appreciation for his helpful and reasoned comments. As always, we cannot print the whole of the letter, but what we have printed shows the way. A letter will be starred each month from now on and the writer of each one will get those books. Why not you?

It is not yet known definitely whether or not our American commentator, Forrest J. Ackerman, will be coming to this country in a month or so for the Convention. The last time he came, in 1950, he gave us all a lot to think about with his delightfully drawling account of science fiction and fandom in the States. A lot has been happening over there since then and it is my guess that he will have even more exciting news for us if he can make the trip. Forry is looking forward to meeting *Authentic* readers, so make sure you are there. (Details from the Convention Secretary, White Horse Tavern, Fetter Lane, E.C.4.)



It is good to see the increasing public awareness of the certainty of space conquest. This is evidenced by space articles in mass-circulation magazines, by cartoons in national daily newspapers, by spaceship models at popular exhibitions, even by futuristic toys in the shops. And there is now a definite possibility that a Government body will be set up to see that Britain does not lag behind in progress towards interplanetary flight.

Let us hope that this body will produce something rather more practical than discussions. There is no doubt about it that Britain *does* lag behind other Powers in this respect, and, I feel, it is the most important respect. Statesmen have not yet collectively realised that the greatest threat against this Commonwealth at the moment is the possibility of some other Power establishing a base on the Moon. Even an artificial satellite would give the

owner nation a tremendous advantage over all others.

In this magazine and in others of its kind, we treat the subject fictionally. But it is incumbent upon us to be sure that it will remain in the realms of fiction only a little longer. By spreading the gospel of science fiction we also bring home to those less imaginative than ourselves the dark possibilities—some would say probabilities—that come from being an earthbound nation while others hold the key to space.

In time, I hope, our politicians will realise that science fiction is not the stuff that childish dreams are made of but the stuff that makes for nightmares of a kind never before experienced in human history. Let us hope they are not too late.

But hope is not enough. Something has to be done. It is being done. Science-fiction fairs are on the increase. This magazine alone can show a list of many thousands of people who never read science fiction before and are now staunch supporters.

They would think it strange, you know, those men in high office, those men in the City with their stocks and shares, those reformers and philosophers and prim and proper highbrow socialists—they would think it strange if you told them that science fiction is playing a vital part in the defence of democracy as we know it in Britain. But it's true.

They would laugh. They might sneer. But the time will come when in one of these editorials I will tell you about that first Moon rocket. I hope it will be one of ours.

H.J.C.

THE ROSE



by

CHARLES L. HARNESS

**In the ultimate evolution, science must
clash with the artist**

HER ballet slippers made a soft slapping sound, moody, mournful, as Anna van Tuyl stepped into the annex of her psychological consulting room and walked toward the tall mirror.

Within seconds she would know whether she was ugly.

As she had done half a thousand times in the past two years, the young woman faced the great glass squarely, brought her arms up gracefully and rose upon her tip-toes. And there resemblance to past hours ceased. She did not proceed to an uneasy study of her



Illustration by Fischer

face and figure. She could not. For her eyes, as though acting with a wisdom and volition of their own, had closed tightly.

Anna van Tuyl was too much the professional psychiatrist not to recognise that her subconscious mind had shrieked its warning. Eyes still shut, and breathing in great gasps, she dropped from her toes as if to turn and leap away. Then gradually she straightened. She must force herself to go through with it. She might not be able to bring herself here, in this mood of candid receptiveness, twice in one lifetime. It must be now.

She trembled in brief, silent premonition, then quietly raised her eyelids.

Sombre eyes looked out at her, a little darker than yesterday: pools ploughed around by furrows that today gouged a little deeper—the result of months of squinting up from the position into which her spinal deformity had thrust her neck and shoulders. The pale lips were pressed together just a little tighter in their defence against unpredictable pain. The cheeks seemed bloodless, having been bleached finally and completely by the Unfinished Dream that haunted her sleep, wherein a nightingale fluttered about a white rose.

As if in brooding confirmation, she brought up simultaneously the pearl-translucent fingers of both hands to the upper borders of her forehead, and there pushed back the incongruous masses of newly-grey hair from two tumorous hulges—like incipient horns. As she did this she made a quarter turn, exposing to the mirror the humped grotesquerie of her back.

Then, by degrees, like some netherworld Narcissus, she began to sink under the bizarre enchantment of that misshapen image. She could retain no real awareness that this creature was she. That profile, as if seen through witch-opened eyes, might have been that of some enormous toad, and this flickering metaphor paralysed her first and only forlorn attempt at identification.

In a vague way, she realised that she had discovered what she had set out to discover. She was ugly. She was even very ugly.

The change must have been gradual, too slow to say of any one day: Yesterday I was not ugly. But even eyes that hungered for deception could no longer deny the cumulative evidence.

So slow—and yet so fast. It seemed only yesterday that had found her face down on Matthew Bell's examination table, hitting savagely at a little pillow as his gnarled fingertips probed grimly at her upper thoracic vertebrae.

Well, then, she was ugly. But she'd not give in to self-pity. To hell with what she looked like! To hell with mirrors!

On sudden impulse she seized her balancing tripod with both hands, closed her eyes, and swung.

The tinkling of falling mirror glass had hardly ceased when a harsh and gravelly voice hailed her from her office. "Bravo!"

She dropped the practice tripod and whirled, aghast. "Matt!"

"Just thought it was time to come in. But if you want to hawl a little, I'll go back out and wait. No?" Without looking directly at her face or pausing for a reply, he tossed a packet on the table. "There it is. Honey, if I could write a ballet score like your *Nightingale and the Rose*, I wouldn't care if my spine was knotted in a figure eight."

"You're crazy," she muttered stonily, unwilling to admit that she was both pleased and curious. "You don't know what it means to have once been able to pirouette, to balance *en arabesque*. And anyway"—she looked at him from the corner of her eye—"how could anyone tell whether the score's good? There's no Finale as yet. It isn't finished."

"Neither is the Mona Lisa, *Xanadu*, or a certain symphony by Schubert."

"But this is different. A plotted ballet requires an integrated sequence of events leading up to a climax—to a Finale. I haven't figured out the ending. Did you notice I left a thirty-eight-beat hiatus just before the *Nightingale* dies? I still need a death song for her. She's entitled to die with a flourish." She couldn't tell

him about *The Dream*—that she always awoke just before that death song began.

"No matter. You'll get it eventually. The story's straight out of Oscar Wilde, isn't it? As I recall, the student needs a red rose as admission to the dance, but his garden contains only white roses. A foolish, if sympathetic nightingale thrusts her heart against a thorn on a white rose stem, and the resultant ill-advised transfusion produces a red rose . . . and a dead nightingale. Isn't that about all there is to it?"

"Almost. But I still need the nightingale's death song. That's the whole point of the ballet. In a plotted ballet, every chord has to be fitted to the immediate action, blended with it, so that it supplements it, explains it, unifies it, and carries the action toward the climax. That death song will make the difference between a good score and a superior one. Don't smile. I think some of my individual scores are rather good, though of course I've never heard them except on my own piano. But without a proper climax, they'll remain unintegrated. They're all variants of some elusive dominating leitmotiv—some really marvellous theme I haven't the greatness of soul to grasp. I know it's something profound and poignant, like the *Liebestod* theme in *Tristan*. It probably states a fundamental musical truth, but I don't think I'll ever find it. The nightingale dies with her secret."

She paused, opened her lips as though to continue, and then fell moodily silent again. She wanted to go on talking, to lose herself in volubility. But now the reaction of her struggle with the mirror was setting in, and she was suddenly very tired. Had she ever wanted to cry? Now she thought only of sleep. But a furtive glance at her wristwatch told her it was barely ten o'clock.

The man's craggy eyebrows dropped in an imperceptible frown, faint, yet craftily alert. "Anna, the man who read your *Rose* score wants to talk to you about staging it for the Rose Festival—you know, the annual affair in the Via Rosa."

"I—an unknown—write a Festival ballet?" She added with dry incredulity: "The Ballet Committee is

in complete agreement with your friend, of course?"

"He *is* the Committee."

"What did you say his name was?"

"I didn't."

She peered up at him suspiciously. "I can play games, too. If he's so anxious to use my music, why doesn't he come to see me?"

"He isn't that anxious."

"Oh, a big shot, eh?"

"Not exactly. It's just that he's fundamentally indifferent toward the things that fundamentally interest him. Anyway, he's got a complex about the Via Rosa—loves the district and hates to leave it, even for a few hours."

She rubbed her chin thoughtfully. "Will you believe it, I've never been there. That's the rose-walled district where the *ars-gratia-artis* professionals live, isn't it? Sort of a plutocratic Rive Gauche?"

The man exhaled in expansive affection. "That's the Via, all right. A six-hundred pound chunk of Carrara marble in every garret, resting most likely on the grand piano. Poppa chips furiously away with an occasional glance at his model, who is *momma*, posed *au naturel*."

Anna watched his eyes grow dreamy as he continued. "Momma is a little restless, having suddenly recalled that the baby's bottle and that can of caviar should have come out of the atomic warmer at some nebulous period in the past. Daughter sits before the piano keyboard, surreptitiously switching from Czerny to a torrid little number she's going to try on the trap-drummer in Dorrin's Via orchestra. Beneath the piano are the baby and mongrel pup. Despite their tender age, this thing is already in their blood. Or at least, their stomachs, for they have just finished an *hors d'oeuvre* of marble chips and now amiably share the *piece de resistance*, a hattered but rewarding tube of Van Dyke brown."

Anna listened to this with widening eyes. Finally she gave a short amazed laugh. "Matt Bell, you really love that life, don't you?"

He smiled. "In some ways the creative life is pretty carefree. I'm just a psychiatrist specialising in psychogenetics. I don't know an arpeggio from a dry point etching, but I like to be around people that do." He bent forward earnestly. "These artists—these golden people—they're the coming force in society. And you're one of them, Anna, whether you know it or like it. You and your kind are going to inherit the earth—only you'd better hurry if you don't want Martha Jacques and her National Security scientists to get it first. So the battle lines converge in Renaissance II. Art versus Science. Who dies? Who lives?" He looked thoughtful, lonely. He might have been pursuing an introspective monologue in the solitude of his own chambers.

"This Mrs. Jacques," said Anna. "What's she like? You asked me to see her tomorrow about her husband, you know."

"Darn good looking woman. The most valuable mind in history, some say. And if she really works out something concrete from her Sciomnia equation, I guess there won't be any doubt about it. And that's what makes her potentially the most dangerous human being alive: National Security is fully aware of her value, and they'll coddle her tiniest whim—at least until she pulls something tangible out of Sciomnia. Her main whim for the past few years has been her errant husband, Mr. Ruy Jacques."

"Do you think she really loves him?"

"Just between me and you she hates his guts. So naturally she doesn't want any other woman to get him. She has him watched, of course. The Security Bureau co-operate with alacrity, because they don't want foreign agents to approach *her* through *him*. There have been ugly rumours of assassinated models . . . But I'm digressing." He cocked a quizzical eye at her. "Permit me to repeat the invitation of your unknown admirer. Like you, he's another true child of the new Renaissance. The two of you should find much in common—more than you can now guess. I'm very serious about this,

Anna. Seek him out immediately—tonight—now. There aren't any mirrors in the Via."

"Please, Matt."

"Honey," he growled, "to a man my age you aren't ugly. And this man's the same. If a woman is pretty, he paints her and forgets her. But if she's some kind of an artist, he talks to her, and he can get rather endless sometimes. If it's any help to your self-assurance, he's about the homeliest creature on the face of the earth. You'll look like De Milo alongside him."

The woman laughed shortly. "I can't get mad at you, can I? Is he married?"

"Sort of." His eyes twinkled. "But don't let that concern you. He's a perfect scoundrel."

"Suppose I decide to look him up. Do I simply run up and down the Via paging all homely friends of Dr. Matthew Bell?"

"Not quite. If I were you I'd start at the entrance—where they have all those queer side-shows and one-man exhibitions. Go on past the vendress of love philters and work down the street until you find a man in a white suit with polka dots."

"How perfectly odd! And then what? How can I introduce myself to a man whose name I don't know? Oh, Matt, this is so silly, so *childish* . . ."

He shook his head in slow denial. "You aren't going to think about names when you see him. And your name won't mean a thing to him, anyway. You'll be lucky if you aren't 'hey you' by midnight. But it isn't going to matter."

"It isn't too clear why you don't offer to escort me." She studied him calculatingly. "And I think you're withholding his name because you know I wouldn't go if you revealed it."

He merely chuckled.

She lashed out: "Damn you, get me a cab."

"I've had one waiting half an hour."

"TELL ya what the professor's gonna do, ladies and gentlemen. He's gonna defend not just one paradox. Not just two. Not just a dozen. No, ladies and gentlemen, the professor's gonna defend *seventeen*, and all in the space of one short hour, without repeating himself, and including a brand-new one he just thought up today: 'Music owes its meaning to its ambiguity.' Remember, folks, an axiom is just a paradox the professor hasn't got hold of yet. The cost of this dazzling display . . . don't crowd there, mister . . ."

Anna felt a relaxing warmth flowing over her mind, washing at the encrusted strata of the past hour. She smiled and elbowed her way through the throng and on down the street, where a garishly lighted sign, bat-wing doors, and a forlorn cluster of waiting women announced the next attraction:

"FOR MEN ONLY. Daring blindfold exhibitions and variety entertainments continuously."

Inside, a loudspeaker was blaring: "Thus we have seen how to compose the ideal end-game problem in chess. And now, gentlemen, for the small consideration of an additional quarter . . ."

But Anna's attention was now occupied by a harsh cawing from across the street.

"Love philters! Works on male or female! Any age! Never fails!"

She laughed aloud. Good old Matt! He had foreseen what these glaring multifaceted nonsensical stimuli would do for her. Love philters! Just what she needed!

The venders of love philters was of ancient vintage, perhaps seventy-five years old. Above cheeks of wrinkled leather her eyes glittered speculatively. And how weirdly she was clothed! Her bedraggled dress was a shrieking purple. And under that dress was another of the same hue, though perhaps a little faded. And under *that*, still another.

"That's why they call me Violet," cackled the old woman, catching Anna's stare. "Better come over and let me mix you one."

But Anna shook her head and passed on, eyes shining.

Fifteen minutes later, as she neared the central Via area, her receptive reverie was interrupted by the outburst of music ahead.

Good! Watching the street dancers for half an hour would provide a highly pleasant climax to her escapade. Apparently there wasn't going to be any man in a polka dot suit. Matt was going to be disappointed, but it certainly wasn't her fault she hadn't found him.

There was something oddly familiar about that music.

She quickened her pace, and then, as recognition came, she began to run as fast as her crouching back would permit. This was *her* music—the prelude to Act III of her ballet!

She burst through the mass of spectators lining the dance square. The music stopped. She stared out into the scattered dancers, and what she saw staggered the twisted frame of her slight body. She fought to get air through her vacuously-wide mouth.

In one unearthly instant, a rift had threaded its way through the dancer-packed square, and a pasty white face, altogether spectral, had looked down that open rift into hers. A face over a body that was enveloped in a strange flowing gown of shimmering white. She thought he had also been wearing a white academic mortar board, but the swarming dancers closed in again before she could be sure.

She fought an unreasoning impulse to run.

Then, as quickly as it had come, logic reasserted itself; the shock was over. Odd costumes were no rarity on the Via. There was no cause for alarm.

She was breathing almost normally when the music died away and someone began a harsh barangue over the public address system. "Ladies and gentlemen, it is our rare good fortune to have with us tonight the genius who composed the music you have been enjoying."

A sudden burst of laughter greeted this, seeming to originate in the direction of the orchestra, and was counterpointed by an uncomplimentary blare from one of the horns.

"Your mockery is misplaced, my friends. It just so

happens that this genius is not I, but another. And since she has thus far had no opportunity to join in the revelry, your inimitable friend, as The Student, will take her hand, as The Nightingale, in the final *pas de deux* from Act III. That should delight her, yes?"

The address system clicked off amid clapping and a buzz of excited voices, punctuated by occasional shouts.

She must escape! She must get away!

Anna pressed back into the crowd. There was no longer any question about finding a man in a polka dot suit. That creature in white certainly wasn't he. Though how could he have recognised her?

She hesitated. Perhaps he had a message from the other one, if there really was one with polka dots.

No, she'd better go. This was turning out to be more of a nightmare than a lark.

Still——

She peeked back from behind the safety of a woman's sleeve, and after a moment located the man in white.

His pasty-white face with its searching eyes was much closer. But what had happened to his white cap and gown? Now, they weren't white at all! What optical fantasy was this? She rubbed her eyes and looked again.

The cap and gown seemed to be made up of green and purple polka dots on a white background! So he was her man!

She could see him now as the couples spread out before him, exchanging words she couldn't hear, but which seemed to carry an irresistible laugh response.

Very well, she'd wait.

Now that everything was cleared up and she was safe again behind her armour of objectivity, she studied him with growing curiosity. Since that first time she had never again got a good look at him. Someone always seemed to get in the way. It was almost, she thought, as though he was working his way out toward her, taking every advantage of human cover, like a hunter closing in on wary quarry, until it was too late . . .

He stood before her.

There were harsh clanging sounds as his eyes locked

with hers. Under that feral scrutiny the woman maintained her mental balance by the narrowest margin.

The Student.

The Nightingale, for love of The Student, makes a Red Rose. An odious liquid was burning in her throat, but she couldn't swallow.

Gradually she forced herself into awareness of a twisted, sardonic mouth framed between aquiline nose and jutting chin. The face, plastered as it was by white powder, had revealed no distinguishing features beyond its unusual size. Much of the brow was obscured by the many tassels dangling over the front of his travestied mortar-board cap. Perhaps the most striking thing about the man was not his face, but his body. It was evident that he had some physical deformity, to outward appearances not unlike her own. She knew intuitively that he was not a true hunchback. His chest and shoulders were excessively broad, and he seemed, like her, to carry a mass of superfluous tissue on his upper thoracic vertebrae. She surmised that the scapulae would be completely obscured.

His mouth twisted in subtle mockery. "Bell said you'd come." He bowed and held out his right hand.

"It is very difficult for me to dance," she pleaded in a low hurried voice. "I'd humiliate us both."

"I'm no better at this than you, and probably worse. But I'd never give up dancing merely because someone might think I looked awkward. Come, we'll use the simplest steps."

There was something harsh and resonant in his voice that reminded her of Matt Bell. Only . . . Bell's voice had never set her stomach churning.

He held out his other hand.

Behind him the dancers had retreated to the edge of the square, leaving the centre empty, and the first beats of her music from the orchestra pavilion floated to her with ecstatic clarity.

Just the two of them, out there . . . before a thousand eyes . . .

Subconsciously she followed the music. There was

her cue—the signal for the Nightingale to fly to her fatal assignation with the white rose.

She must reach out both perspiring hands to this stranger, must blend her deformed body into his equally misshapen one. She must, because he was The Student, and she was The Nightingale.

She moved toward him silently and took his hands.

As she danced, the barsb-lit street and faces seemed gradually to vanish. Even The Student faded into the barely perceptible distance, and she gave herself up to The Unfinished Dream.

SHE dreamed that she danced alone in the moonlight, that she fluttered in solitary circles in the moonlight, fascinated and appalled by the thing she must do to create a Red Rose. She dreamed that she sang a strange and magic song, a wondrous series of chords, the song she had so long sought. Pain buoyed her on excruciating wings, then flung her heavily to earth. The Red Rose was made, and she was dead.

She groaned and struggled to sit up.

Eyes glinted at her out of pasty whiteness. "That was quite a *pas*—only more *de seul* than *de deux*," said the Student.

She looked about in uneasy wonder.

They were sitting together on a marble bench before a fountain. Behind them was a curved walk bounded by a high wall covered with climbing green, dotted here and there with white.

She put her hand to her forehead. "Where are we?"

"This is White Rose Park."

"How did I get here?"

"You danced in on your own two feet through the archway yonder."

"I don't remember . . ."

"I thought perhaps you were trying to lend a bit of realism to the part. But you're early."

"What do you mean?"

"There are only white roses growing in here, and even *they* won't be in full bloom for another month.

In late June they'll be a real spectacle. You mean you didn't know about this little park?"

"No. I've never even been in the Via before. And yet . . ."

"And yet what?"

She hadn't been able to tell anyone—not even Matt Bell—what she was now going to tell this man, an utter stranger, her companion of an hour. He had to be told because, somehow, he too was caught up in the dream ballet.

She began haltingly. "Perhaps I *do* know about this place. Perhaps someone told me about it, and the information got hurried in my subconscious mind until I wanted a white rose. There's really something behind my ballet that Dr. Bell didn't tell you. He couldn't, because I'm the only one who knows. The *Rose* music comes from my dreams. Only, a better word is night-mares. Every night the score starts from the beginning. In the dream, I dance. Every night, for months and months, there was a little more music, a little more dancing. I tried to get it out of my head, but I couldn't. I started writing it down, the music and the choreography."

The man's unsmiling eyes were fixed on her face in deep absorption.

Thus encouraged, she continued. "For the past several nights I have dreamed almost the complete ballet, right up to the death of the nightingale. I suppose I identify myself so completely with the nightingale that I sub-consciously censor her song as she presses her breast against the thorn on the white rose. That's where I always awakened, or at least, always did before tonight. But I think I heard the music tonight. It's a series of chords . . . thirty-eight chords, I believe. The first nineteen were frightful, but the second nineteen were marvellous. Everything was too real to wake up. The Student, The Nightingale, The White Roses."

But now the man threw back his head and laughed raucously. "You ought to see a psychiatrist!"

Anna bowed her head humbly.

"Oh, don't take it too hard," he said. "My wife's even after me to see a psychiatrist."

"Really?" Anna was suddenly alert. "What seems to be wrong with you? I mean, what does she object to?"

"In general, my laziness. In particular, it seems I've forgotten how to read and write." He gave her widening eyes a sidelong look. "I'm a perfect parasite, too. Haven't done any real work in months. What would you call it if you couldn't work until you had the final measures of the *Rose*, and you kept waiting, and nothing happened?"

"Hell."

He was glumly silent.

Anna asked, hesitantly, yet with a growing certainty. "This thing you're waiting for . . . might it have anything to do with the ballet? Or to phrase it from your point of view, do you think the completion of my ballet may help answer your problem?"

"Might. Couldn't say."

She continued quietly. "You're going to have to face it eventually, you know. Your psychiatrist is going to ask you. How will you answer?"

"I won't. I'll tell him to go to the devil."

"How can you be so sure he's a *he*?"

"Oh? Well, if he's a *she*, she might be willing to pose *al fresco* an hour or so. The model shortage is quite grave you know, with all of the little dears trying to be painters."

"But if she doesn't have a good figure?"

"Well, maybe her face has some interesting possibilities. It's a rare woman who's a total physical loss."

Anna's voice was very low. "But what if *all* of her were very ugly? What if your proposed psychiatrist were me, *Mr. Ray Jacques*?"

His great dark eyes blinked, then his lips pursed and exploded into insane laughter. He stood up suddenly. "Come, my dear, whatever your name is, and let the blind lead the blind."

"Anna van Tuyt," she told him, smiling.

She took his arm. Together they strolled around the arc of the walk toward the entrance arch.

She was filled with a strange contentment.

Over the green-crested wall at her left, day was about to break, and from the Via came the sound of groups of die-hard revellers, breaking up and drifting away, like spectres at cock-crow. The cheerful clatter of milk bottles got mixed up in it somehow.

They paused at the archway while the man kicked at the seat of the pants of a spectre whom dawn had returned to slumber beneath the arch. The sleeper cursed and stumbled to his feet in heavy indignation.

"Excuse us, Willie," said Anna's companion, motioning for her to step through.

She did, and the creature of the night at once dropped into his former sprawl.

Anna cleared her throat. "Where now?"

"At this point I must cease to be a gentleman. *I'm* returning to the studio for some sleep, and you can't come. For, if your physical energy is inexhaustible, mine is not." He raised a hand as her startled mouth dropped open. "Please, dear Anna, don't insist. Some other night, perhaps."

"Why, you——"

"Tut tut." He turned a little and kicked again at the sleeping man. "I'm not an utter cod, you know. I would never abandon a weak, frail, unprotected woman in the Via."

She was too amazed now even to sputter.

Ruy Jacques reached down and pulled the drunk up against the wall of the arch, where he held him firmly. "Dr. Anna van Tuyl, may I present Willie the Cork."

The Cork grinned at her in unfocused somnolence.

"Most people call him the Cork because, that's what seals in the bottle's contents," said Jacques. "*I* call him the Cork because he's always hobbing up. He looks like a hum, but that's just because he's a good actor. He's really a Security man tailing me at my wife's request, and he'd only be too delighted for a little

further conversation with you. A cheery good morning to you both!"

A milk truck wheeled around the corner. Jacques leaped for its running board, and he was gone before the psychiatrist could voice the protest boiling up in her.

A gurgling sigh at her feet drew her eyes down momentarily. The Cork was apparently bobbing once more on his own private alcoholic ocean.

Anna snorted in mingled disgust and amusement, then hailed a cab. As she slammed the door, she took one last look at Willie. Not until the cab rounded the corner and cut off his muffled snores did she realize that people usually don't snore with their eyes half-opened and looking at you, especially with eyes no longer blurred with sleep, but hard and glinting.

TWELVE hours later, in another cab and in a different part of the city, Anna peered absently out at the stream of traffic. Her mind was on the coming conference with Martha Jacques. Only twelve hours ago Mrs. Jacques had been just a bit of necessary case history. Twelve hours ago Anna hadn't really cared whether Mrs. Jacques followed Bell's recommendation and gave her the case. Now it was all different. She wanted the case, and she was going to get it.

Ruy Jacques—how many hours awaited her with this amazing scoundrel, this virtuoso of liberal—nay, loose—arts, who held locked within his remarkable mind the missing pieces of their joint jigsaw puzzle of *The Rose*?

That jeering, mocking face—what would it look like without makeup? Very ugly, she hoped. Beside his, her own face wasn't too bad.

Only—he was married, and she was en route at this moment to discuss preliminary matters with his wife, who, even if she no longer loved him, at least had prior rights to him. There were considerations of professional ethics even in thinking about him. Not that she could ever fall in love with him or any other patient. Particularly

with one who had treated her so cavalierly. Willie the Cork, indeed!

As she waited in the cold silence of the great ante-chamber adjoining the office of Martha Jacques, Anna sensed that she was being watched. She was quite certain that by now she'd been photographed, x-rayed for hidden weapons, and her fingerprints taken from her professional card. In colossal central police files a thousand miles away, a bored clerk would be leafing through her dossier for the benefit of Colonel Grade's visigraph in the office beyond.

In a moment——

"Dr. van Tuyl to see Mrs. Jacques. Please enter door B-3," said the tinny voice of the intercom.

She followed a guard to the door, which he opened for her.

This room was smaller. At the far end a woman, a very lovely woman, whom she took to be Martha Jacques, sat peering in deep abstraction at something on the desk before her. Beside the desk, and slightly to the rear, a moustached man in plain clothes stood, reconnoitring Anna with hawk-like eyes. The description fitted what Anna had heard of Colonel Grade, Chief of the National Security Bureau.

Grade stepped forward and introduced himself curtly, then presented Anna to Mrs. Jacques.

And then the psychiatrist found her eyes fastened to a sheet of paper on Mrs. Jacques' desk. And as she stared, she felt a sharp dagger of ice sinking into her spine, and she grew slowly aware of a background of brooding whispers in her mind, heart-constricting in their suggestions of mental disintegration.

For the thing drawn on the paper, in red ink, was—although warped, incomplete, and misshapen—unmistakably a rose.

"Mrs. Jacques!" cried Grade.

Martha Jacques must have divined simultaneously Anna's great interest in the paper. With an apologetic murmur she turned it face down. "Security regulations, you know. I'm really supposed to keep it locked up in

the presence of visitors." Even a murmur could not hide the harsh metallic quality of her voice.

So *that* was why the famous Sciomna formula was sometimes called the "Jacques Rosette": when traced in an ever-expanding wavering red spiral in polar co-ordinates, it was . . . a Red Rose.

The explanation brought at once a feeling of relief and a sinister deepening of the sense of doom that had overshadowed her for months. So you, too, she thought wonderingly, seek The Rose. Your artist-husband is wretched for want of it, and now you. But do you seek the same rose? Is the rose of the scientist the true rose, and Ruy Jacques' the false? What is the rose? Will I ever know?

Grade broke in. "Your brilliant reputation is deceptive, Dr. van Tuyl. From Dr. Bell's description, we had pictured you as an older woman."

"Yes," said Martha Jacques, studying her curiously. "We really had in mind an older woman, one less likely to . . . to——"

"To involve your husband emotionally?"

"Exactly," said Grade. "Mrs. Jacques must have her mind completely free from distractions. However"—he turned to the woman scientist—"it is my studied opinion that we need not anticipate difficulty from Dr. van Tuyl on that account."

Anna felt her throat and cheeks going hot as Mrs. Jacques nodded in damning agreement: "I think you're right, Colonel."

"Of course," said Grade, "*Mr.* Jacques may not accept her."

"That remains to be seen," said Martha Jacques. "He might tolerate a fellow artist." To Anna: "Dr. Bell tells us that you compose music, or something like that?"

"Something like that," nodded Anna. She wasn't worried. It was just a question of waiting. This woman's murderous jealousy, though it might some day destroy her, at the moment concerned her not a whit.

Colonel Grade said: "Mrs. Jacques has probably warned you that her husband is somewhat eccentric; he

may be somewhat difficult to deal with at times. On this account, the Security Bureau is prepared to triple your fee, if we find you acceptable."

Anna nodded gravely. Ruy Jacques and money, too!

"For most of your consultations you'll have to track him down," said Martha Jacques. "He'll never come to you. But considering what we're prepared to pay, this inconvenience should be immaterial."

Anna thought briefly of that fantastic creature who had singled her out of a thousand faces. "That will be satisfactory. And now, Mrs. Jacques, for my preliminary orientation, suppose you describe some of the more striking behaviourisms that you've noted in your husband!"

"Certainly. Dr. Bell, I presume, has already told you that Ruy has lost the ability to read and write. Ordinarily that's indicative of advanced dementia praecox, isn't it? However, I think Mr. Jacques' case presents a more complicated picture, and my own guess is schizophrenia rather than dementia. The dominant and most frequently observed psyche is a megalomaniac phase, during which he tends to harangue his listeners on various odd subjects. We've picked up some of these speeches on a hidden recorder and made a Zipf analysis of the word-frequencies."

Anna's brows creased dubiously. "A Zipf count is pretty mechanical."

"But scientific, undeniably scientific. I have made a careful study of the method, and can speak authoritatively. Back in the forties Zipf of Harvard proved that in a representative sample of English, the interval separating the repetition of the same word was inversely proportional to its frequency. He provided a mathematical formula for something previously known only qualitatively: that a too-soon repetition of the same or similar sound is distracting and grating to the cultured mind. If we must say the same thing in the next paragraph, we avoid repetition with an appropriate synonym. But not the schizophrenic. His disease disrupts his higher centres of association, and certain discriminating neural networks are no longer available for his writing

and speech. He has no compunction against immediate and continuous tonal repetition."

"A rose is a rose is a rose . . ." murmured Anna.

"Eh? How did you know what this transcription was about? Oh, you were just quoting Gertrude Stein? Well, I've read about her, and she proves my point. She admitted that she wrote under autohypnosis, which we'd call a light case of schizo. But she could be normal, too. My husband never is. He goes on like this all the time. This was transcribed from one of his monologues. Just listen:

"Behold, Willie, through yonder window the symbol of your mistress' defeat: The Rose! The rose, my dear Willie, grows not in murky air. The smoky metropolis of yester-year drove it to the country. But now, with the unsullied skyline of your atomic age, the red rose returns. How mysterious, Willie, that the rose continues to offer herself to us dull, plodding humans. We see nothing in her hut a pretty flower. Her regretful thorns forever declare our inept clumsiness, and her lack of honey chides our gross sensuality. Ah, Willie, let us become as birds! For only the winged can eat the fruit of the rose and spread her pollen . . ."

Mrs. Jacques looked up at Anna. "Did you keep count? He used the word 'rose' no less than five times, when once or twice was sufficient. He certainly had no lack of mellifluous synonyms at his disposal, such as 'red flower,' 'thorned plant,' and so on. And instead of saying 'the red rose returns' he should have said something like 'it comes back'."

"And lose the triple alliteration?" smiled Anna. "No, Mrs. Jacques, I'd re-examine that diagnosis very critically. Everyone who talks like a poet isn't necessarily insane."

A tiny bell began to jangle on a massive metal door in the right-hand wall.

"A message for me," growled Grade. "Let it wait."

"We don't mind," said Anna, "if you want to have it sent in."

"It isn't *that*. That's my private door, and I'm the only one who knows the combination. But I told them

not to interrupt us, unless it dealt with this specific interview."

Anna thought of the eyes of Willie the Cork, hard and glistening. Suddenly she knew that Ruy Jacques had not been joking about the identity of the man. Was The Cork's report just now getting on her dossier? Mrs. Jacques wasn't going to like it. Suppose they turned her down. Would she dare seek out Ruy Jacques under the noses of Grade's trigger men?

"Damn that fool," muttered Grade. "I left strict orders about being disturbed. Excuse me."

He strode angrily toward the door. After a few seconds of dial manipulation, he turned the handle and pulled it inward. A hand thrust something metallic at him. Anna caught whispers. She fought down a feeling of suffocation as Grade opened the casset and read the message.

The Security officer walked leisurely back toward them. He stroked his moustache coolly, handed the bit of paper to Martha Jacques, then clasped his hands behind his back. For a moment he looked like a glowering bronze statue. "Dr. van Tuyl, you didn't tell us that you were already acquainted with Mr. Jacques. Why?"

"You didn't ask me."

Martha Jacques said harshly: "That answer is hardly satisfactory. How long have you known Mr. Jacques? I want to get to the bottom of this."

"I met him last night for the first time in the Via Rosa. We danced. That's all. The whole thing was purest coincidence."

"You are his lover," accused Martha Jacques.

Anna coloured. "You flatter me, Mrs. Jacques."

Grade coughed. "She's right, Mrs. Jacques. I see no sex-based espionage."

"Then maybe it's even subtler," said Martha Jacques. "These platonic females are still worse, because they sail under false colours. She's after Ruy, I tell you."

"I assure you," said Anna, "that your reaction comes as a complete surprise to me. Naturally, I shall withdraw from the case at once."

"But it doesn't end with that," said Grade curtly. "The national safety may depend on Mrs. Jacques' peace of mind during the coming weeks. I *must* ascertain your relation with Mr. Jacques. And I must warn you that if a compromising situation exists, the consequences will be most unpleasant." He picked up the telephone. "Grade. Get me the O.D."

Anna's palms were uncomfortably wet and sticky. She wanted to wipe them on the sides of her dress, but then decided it would be better to conceal all signs of nervousness.

Grade barked into the mouthpiece. "Hello! That you, Packard? Send me——"

Suddenly the room vibrated with the shattering impact of massive metal on metal.

The three whirled toward the sound.

A stooped, loudly dressed figure was walking away from the great and inviolate door of Colonel Grade, drinking in with sardonic amusement the stuporous faces turned to him. It was evident he had just slammed the door behind him with all his strength.

Insistent squeakings from the teletel stirred Grade into a feeble response. "Never mind . . . it's Mr. Jacques . . ."

THE swart ugliness of that face verged on the sublime. Anna observed for the first time the two horn-like protuberances on his forehead, which the man made no effort to conceal. His black woollen beret was cocked jauntily over one horn; the other, the visible one, bulged even more than Anna's horns, and to her fascinated eyes he appeared as some Greek satyr: Silenus with an eternal hangover, or Pan wearying of fruitless pursuit of fleeting nymphs. It was the face of a cynical post-gaol Wilde, of a Rimbaud, of a Goya turning his brush in saturnine glee from Spanish *grandees* to the horror-world of *Ensayos*.

Like a phantom voice, Matthew Bell's cryptic prediction seemed to float into her ears again: ". . . much in common . . . more than you guess . . ."

There was so little time to think. Ray Jacques must have recognised her frontal deformities even while that tassellated mortar-board of his Student costume had prevented her from seeing his. He must have identified her as a less advanced case of his own disease. Had he foreseen the turn of events here? Was he here to protect the only person on earth who might help him? That wasn't like him. He just wasn't the sensible type. She got the uneasy impression that he was here solely for his own amusement—simply to make fools of the three of them.

Grade began to sputter. "Now see here, Mr. Jacques. It's impossible to get in through that door. It's my private entrance. I changed the combination myself only this morning." The moustache bristled indignantly. "I must ask the meaning of this."

"Pray do, Colonel, pray do."

"Well, then, what is the meaning of this?"

"None, Colonel. Have you no faith in your own syllogisms? No one can open your private door but you. Q.E.D. No one did. I'm not really here. No smiles? Tsk tsk! Paragraph 6, p. 840 of the Manual of Permissible Military Humour officially recognises the paradox."

"There's no such publication——" stormed Grade.

But Jacques brushed him aside. He seemed now to notice Anna for the first time, and bowed with exaggerated punctilio. "My profound apologies, madame. You were standing so still, so quiet, that I mistook you for a rose bush." He beamed at each in turn. "Now isn't this delightful? I feel like a literary lion. It's the first time in my life that my admirers ever met for the express purpose of discussing my work."

How could he know that we were discussing his "composition," wondered Anna. *And how did he open the door?*

"If you'd eavesdropped long enough," said Martha Jacques, "you'd have learned we weren't admiring your 'prose poem'. In fact, I think it's pure nonsense."

No, thought Anna, he couldn't have eavesdropped, because we didn't talk about his speech after Grade

opened the door. There's something here—in this room—that *tells* him.

"You don't even think it's poetry?" repeated Jacques, wide-eyed. "Martha, coming from one with your scientifically developed poetical sense, this is utterly damning."

"There *are* certain well recognised approaches to the appreciation of poetry," said Martha Jacques doggedly. "You ought to have the autoscanner read you some hooks on the esthetic laws of language. It's all there."

The artist blinked in great innocence. "What's all there?"

"Scientific rules for analysing poetry. Take the mood of a poem. You can very easily learn whether it's gay or sombre just by comparing the proportion of low-pitched vowels—u and o, that is—to the high-pitched vowels—a, e and i."

"Well, what do you know about that!" He turned a wondering face to Anna. "And she's right! Come to think of it, in Milton's *L'Allegro*, most of the vowels are high-pitched, while in his *Il Penseroso*, they're mostly low-pitched. Folks, I believe we've finally found a yardstick for genuine poetry. No longer must we flounder in poetastical soup. Now let's see." He rubbed his chin in blank-faced thoughtfulness. "Do you know, for years I've considered Swinburne's lines mourning Charles Baudelaire to be the distillate of sadness. But that, of course, was before I had heard of Martha's scientific approach, and had to rely solely on my unsophisticated, untrained, uninformed feelings. How stupid I was! For the thing is crammed with high-pitched vowels, and long e dominates: 'thee,' 'sea,' 'weave,' 'eve,' 'heat,' 'sweet,' 'feet' . . ." He struck his brow as if in sudden comprehension. "Why, it's gay! I must set it to a snappy polka!"

"Drivel," sniffed Martha Jacques. "Science——"

"——is simply a parasitical, adjectival, and useless occupation devoted to the quantitative restatement of Art," finished the smiling Jacques. "Science is functionally sterile; it creates nothing; it says nothing new. The

scientist can never be more than a humble camp-follower of the artist. There exists no scientific truism that hasn't been anticipated by creative art. The examples are endless. Uccello worked out mathematically the laws of perspective in the fifteenth century; but Kallikrates applied the same laws two thousand years before in designing the columns of the Parthenon. The Caries thought they invented the idea of 'half-life'—of a thing vanishing in proportion to its residue. The Egyptians tuned their lyre-strings to dampen according to the same formula. Napier thought he invented logarithms—entirely overlooking the fact that the Roman brass workers flared their trumpets to follow a logarithmic curve."

"You're deliberately selecting isolated examples," retorted Martha Jacques.

"Then suppose you name a few so-called scientific discoveries," replied the man. "I'll prove they were scooped by an artist, every time."

"I certainly shall. How about Boyle's gas law? I suppose you'll say Praxiteles knew all along that gas pressure runs inversely proportional to its volume at a given temperature?"

"I expected something more sophisticated. That one's too easy. Boyle's gas law, Hooke's law of springs, Galileo's law of pendulums, and a host of similar hog-wash simply state that compression, kinetic energy, or whatever name you give it, is inversely proportional to its reduced dimensions, and is proportional to the amount of its displacement in the total system. Or, as the artist says, impact results from, and is proportional to, displacement of an object within its milieu. Could the final couplet of a Shakespearean sonnet enthrall us if our minds hadn't been conditioned, held in check, and compressed in suspense by the preceding fourteen lines? Note how cleverly Donne's famous poem builds up to its crash line, 'It tolls for thee!' By blood, sweat, and genius, the Elizabethans lowered the entropy of

(Continued on page 71.)

a leading sf author
writes our Guest Article—

SCIENTIST AND CENSOR

Should they Meddle?

by William F. Temple

GLANCING over a small pre-war and now defunct magazine the other day I came across an article by myself dealing with science-fiction films, which are anything but new phenomena. (One of the earliest films of any kind was Melies' "A Trip to the Moon," produced in 1897; and H. G. Wells' "The First Men in the Moon" was filmed in 1919, and the list between then and the last war is surprisingly long.)

The article ran on a complaining note. Many of these films dealt with strange creatures, discovered or fashioned. Why, I asked, did all these poor freaks have to be killed off at the end? The simian Mr. Hyde from "Dr. Jekyll and Mr. Hyde" was pumped full of lead, and so was Griffin, "The Invisible Man." Frankenstein's Monster was hurled to death. "King Kong" was shot down from the top of the Empire State Building, and "The Son of Kong" disappeared, bubbling, under a tidal wave. And so on.

Worse than this merciless slaughter of rare living scientific specimens, I opined, were the sentiments expressed by the slaughterers, who would gather in pious groups after the killing and tell each other hushedly that there are things we aren't meant to meddle with. "There are boundaries we aren't meant to cross" was a favourite line.

Often, too, the scientist responsible for finding or creating the creature would repent in the last reel and join the group. In fact, usually he was the centre of it, fatally monster-handled by his brain-child, and gasping, before rolling up his eyes: "I didn't oughter have done it. There are boundaries . . . etc."

My article ended: "In future we demand cinematic scientists who realise that it's their duty to 'meddle'."

I couldn't have guessed then that one day a science-fiction film bearing my name (although I didn't write the script) would end up with the rare creature being duly destroyed in routine fashion, and its creator done for too, in a general chorus of "He didn't oughter . . ."

For this was the first scenario ending of the film version of my novel *Four-sided Triangle*. The creature was a girl, artificially made. The book ending allows her at least the possibility of survival. The first film scenario swatted her like a fly. I protested, and others agreed and managed to get my climax substituted, and filming began on the new script.

I might have known I wouldn't get away with it. But the real executioner is not a film character nor even the script-writer. He stands behind the scenes, still roughly where he was before the war. Down came the censor's axe and my creature's head rolled. It had to. There must be no question about a creature unnaturally horn ever surviving. We are not the masters of life and death, pronounces the censor, and we must not assume that power (except in war, it seems).

Is he right?

Strange that I, who once knew the answer, now do not. (My protest about my film was based, not on moral principles, but on those of good story-telling.) I survey the results of scientists' "meddling" since those days and I see penicillin and the atomic bomb, streptomycin and the V-2.

And somehow I feel that the good and bad of it, like the light and shade of life, can never be separated. And that neither the scientist nor the censor really knows any more about it than I.

W.F.T.



In the journal *Interagro*, published in Czechoslovakia, two Russian biologists claim to have discovered a means of converting viruses to bacteria and back again. Apart from the possible applications of this in clinical medicine, the discovery, if it is confirmed, would have enormous theoretical importance. Viruses are creatures which may or may not be living. Some biologists believe they represent a mid-way stage between living and non-living matter, behaving sometimes as one and sometimes as the other. The Russian work, in a way, is tantamount to the creation of life, for bacteria are most definitely alive!

She knew too
much—about
the wrong things

Never Been Kissed

by E. Everett Evans

JAMES FOXE stood on the tarmac at Terramars Field watching the *New York* come down through the tenuous atmosphere. He never tired of this sight of a great liner coming in from Space. The tremendous flares of her braking rockets; the jockeying for the belly landing; the huge tractors towing her up to the tarmac after she'd landed and shut off her rockets.

He watched the passengers disembark. This, too, was always interesting. Sight of new faces was a sensation of pleasure to anyone so far away from Terra.

Suddenly his attention was riveted to a lovely feminine figure coming hesitantly down the gangplank. She was looking about her in a bewildered manner. He started toward her, and her startling beauty made itself more apparent to him.

"*Whewoo!*" he whistled. Earth was certainly making them more beautiful every year.

He went up to her.

"Are you assigned yet, Miss?"

"No, sir." She was very shy.

"What is your classification?"

"Speed typist, sir."

She fumbled in her bag and she brought out her passbook.

He glanced through it quickly, whistled again with amazement. She was rated highest efficiency, *plus*.

"I need an expert typist," he said. He smiled. "Would you like to work for me?"

She glanced up at him and he smiled again as winningly as he could while she was studying him.

"Yes," his voice was low, but eager. "Yes, sir, I think it would be nice to work for you."



Illustrated by DAVIS

"All right, I'll fix it. But first, you don't need to call me 'sir' all the time. My name's James Foxe, but my friends all call me 'Jimmy.' I hope you'll be one of those friends."

She smiled shyly again. "I hope so, too . . . Jimmy."

He picked up her bag just as she stooped for it. His arm brushed against the satiny-soft texture of hers, sending a current of pleasure sensations racing through him. How warmly human she was . . .

He found a cab and he took her to the John Storer Engineering offices, where he was assistant to the general manager. He led her into his office. On one of the twin desks of polished plastolite rested a latest model electric typewriter. She gave a little cry of recognition.

"That's the kind I like best. I'm so glad you have one of them, instead of one of the old models. I can work much faster on this."

She stood by it, smiling, and he marvelled at the way she ran her hands over it lovingly, caressingly.

Suddenly he found himself wishing she would stroke him in the same way. Why should he wish such a thing?

He went to his own desk and picked up a number of sheets of paper, filled with words and numbers.

"These are what we call 'specification lists,'" he explained. "We go over them from time to time, making changes, taking out certain items, adding others. Then they have to be recopied absolutely letter perfect. That is important. These have been revised and are ready for typing."

She nodded her head. He liked the way her silky, blue-black curls bobbed and danced with the movement.

He handed her a number of the pages and he explained about the page numbering, the margins, the spacing.

She took the pages and started typing. Her fingers fairly flashed over the keys of the electrotyper, and when she glanced up at the end of the first page she found him eyeing her with amazement.

"Is anything wrong?" Her voice was husky with the fear that she had displeased him already.

"Wrong? Good Lord, no!" The words were almost an explosion. "I just never saw anyone type that fast before!"

He could tell this pleased her, for she was smiling once more, though still shyly, and the fear-look was gone from her eyes.

"They said at school I was the fastest they'd ever had, but I wouldn't know for sure."

"I can believe you are. Let me see your first page, please."

He studied it carefully and he proofread it for mistakes. There were none. Also, the page was a model of neatness.

He grinned as he handed it back. "The Chief won't believe it when I tell him about you."

That pleased smile was lurking about her lips as she went back to work.

When dusk brought the closing bell's sound, he took her out and found her a rooming-place near the office. He explained about the hours of work and made sure she knew how to get to the office building.

"Goodnight, Barbara," he smiled.

"Good night . . . Jimmy," he barely heard as he moved away.

During work the next morning Foxe turned to a little box that stood on a small stand beside his desk. He reached out a hand toward it, then stopped and swung about to face his new typist.

"Does it bother you to have music playing while you work, Barbara?"

"I don't know," her voice was doubtful. "I don't think I ever heard any."

"Never heard . . . oh, you mean while working. Well, I like it, so let's try it."

He twisted a couple of knobs, and suddenly a cascade of beautiful melody was spilling out into the room. She stopped working in amazement, a fascinated expression on her face.

"What is that?" she asked breathlessly.

"That's the Grieg Piano Concerto."

"Oh."

The word was small and wondering. She sat, hands idle in her lap, rapt in the wonderful sounds until the number was finished.

"What's a grieg piano concerto, Jimmy?" Her eyes were wide with perplexity.

"Good Lord, Barbara, don't you know anything at all about music?"

She shook her head, eyes clouded. He realised she thought he was displeased with her. He'd never seen anyone so shy, so touchy; had to watch every word and gesture.

"What did they teach you at that school?" There was exasperation in his voice. "I didn't suppose there was anyone who'd never heard about music."

"They started me in on reading and spelling and grammar. Then some elemental arithmetic. After that they started me in on typing. They taught me how to care for and repair my machine, and also how to care for my body. That's all."

He shook his head in disbelief. "Didn't you ever have any *fun*?"

"What is 'fun'?"

"Fun is enjoying yourself doing something you don't have to do, just for the pleasure you get out of it."

"Oh, yes, then I've had fun." Her eyes shone momentarily, then they dropped shyly again. "But I'm afraid you'll laugh at me if I tell you about it."

"No," he assured her earnestly. "I won't laugh."

"I used to dream about people."

"Little Miss Ignorance," he jeered, but so tenderly that no offence could possibly be taken from his words.

"Could I learn about music?"

"You certainly can. I have quite a large collection of recordings. I'll take you home with me after work and play some for you."

She looked at him doubtfully. "You're sure it is all right for one like me to go with you outside of work?"

"It most certainly is! I'll be glad to help you learn something about music appreciation."

She turned back to her work happily, and her fingers on the typewriter keys were almost a blur of speed the rest of the day.

FOXE was just turning the corner of the hall going to his office the next morning when he saw a tall, harsh-eyed, brassy blonde going through the doorway. Betty Bowser. He wondered why she was going into his office. It couldn't be for any good, he was sure. He hurried up and he eavesdropped shamelessly outside his door.

"Look, Mouse," he heard tones as harsh and brassy as the owner's looks, "you lay off Jim Foxe. I saw him first!"

He could imagine shy, timid little Barbara shrinking back in her seat at that cold, unfriendly, commanding tone. Then he heard her voice, low and tremulous.

"I . . . I'm sorry. I didn't know. I just got here yesterday."

"Fast worker, eh?" the brassy voice sneered. "Well, I'm telling you again, lay off! If I catch you going out with him again, there'll be plenty of trouble—and all from me to you."

"Thank you for telling me, Miss," the small, sweet voice was apologetic and conciliatory. "I don't want ever to overstep my place, and you may be sure I shall be careful from now on, not to do so."

Foxe heard a sniff, and there was a pause. Then, "Either you're a dumb 'un, or you're mighty deep. I don't know which yet." Another pause, and he guessed that Bowser was studying the little, pathetic figure before her. "All right, I can see you're just dumb."

The blonde turned and walked out of the office, straight into the arms of James Foxe.

He shook her mercilessly until she almost screamed.

"What do you think you're doing?" Foxe's voice was low, yet anger was making it hard for him to control it. "You're the one that's going to lay off, understand?"

Yes, you saw me first, but I saw you second. I've made it very plain that I want nothing to do with you. I can't stand anyone who acts like you do. Now get out and stay away from me—and from Barbara Greenwood! I mean that both as a threat and a promise that you'll not like what happens if you don't."

He gave her a shove and she stumbled away down the hall. Foxe went into his office.

Barbara was trying to work, but her eyes were tear-misted and she was typing at a bare hundred and fifty words a minute.

Foxe went up to her and he put his hands over hers, gently, stopping the work. She looked up in alarm, but he smiled so companionably her eyes gradually lost the fear-look.

"Don't you ever give a moment's thought to that hussy's words, Barbara," he commanded softly. "She has no hold on me whatsoever, and never did. If you want to go out with me when I ask you to, there is absolutely no one who has the right to tell you 'No.' You believe that, don't you?"

She searched his grey eyes, found a measure of helief in them. She smiled tremulously back at him, and relief dried her tears.

"I'm so glad," she whispered, so low he barely heard.

"Just to show the whole world," he grinned then, "I'll ask you now what I was on my way to ask you when I came in. Will you go to the video with me tonight? They're broadcasting an opera from Terra—it's one of the greatest pieces of music ever written, and different from any I played for you last night."

The frightened look came back into her eyes.

"I want to . . . so much . . . Jimmy . . . but I'm afraid. Are you sure it's all right?"

"Poor Little Miss Ignorance," he fondled her satin-smooth hands. "You've got to forget about that blonde and her talk. I told you there's nothing anyone can or would say or do. And I'll prove it to you, right now. Come with me."

He half-lifted her from her seat, and with his hand on her arm led her into the private office of John Storer.

"Chief, this is my new typist, Miss Barbara Greenwood, just in from Terra. She's a whiz, too. Fastest and most accurate typist I've ever seen."

The fatherly-looking figure behind the desk rose and smiled.

"Welcome to our group, Miss Greenwood," he greeted her. "We hope you'll like it here and want to stay with us."

She smiled shyly and made a half-curtsey, but said nothing.

"I brought her in here just now mainly to have you explain something to her," Foxe resumed. "I found out yesterday that she knew nothing about music, but liked it from the first time she heard any when I turned my radio on. So I took her to my place last night and played some records for her, explaining about them. Today, that loud-mouthed Betty Bowser went into my office when I wasn't there, and half-scared Barbara into hysterics by threatening all sorts of things if she ever went anywhere with me again. I told Bobby no one had any right to tell her what she could or could not do in cases like that, but she only half-believes me. I want to take her to hear the broadcast of *Tristan Und Isolde* tonight, but she's afraid to go. Tell her, please; whether it is right for her to do so, or not."

Storer turned to Barbara, and his smile was more fatherly than ever.

"Here on Mars, my dear, the only real law of convention is that you do not overstep the bounds of good taste. If you want to go anywhere with Jimmy, you go right ahead. No one has the right to stop you. You'll be both safe and happy with the young pup."

The pleasure sensation came back to Barbara again. She smiled her thanks.

"I'm so glad you told me, sir. It makes me very happy. And I do like to work here, and I hope I can stay here always."

THE opera that night was another revelation to Barbara. She sat so still in her seat she hardly seemed to be breathing—only little gasps of enjoyment came out from time to time.

So, too, was the dancing to which Foxe introduced her afterwards. The rhythmic movements were so completely in accord with her very being, that she soon wished they could dance all the time.

Foxe was beginning to be almost amazed at the quickness with which she acquired and retained knowledge of new subjects. He said something of this as they were walking slowly back to her room.

"I don't know anything about how or why," she shook her head in answer to a question. "I hadn't realised how much there was I didn't know. But now, once you tell me things, they just seem to stick in my head. I got a book on music from the library and read it last night, and I seem to remember everything that was in it. It was the same with the dancing; once you showed me the steps, it seemed as though I'd known them all my life."

"Eidetic memory, probably," he mused aloud. Then a thought struck him. "How long does it take you to read an ordinary page of print?"

"Why, I don't really know. I just seem to glance at it and know what's there." She looked up in surprise. "Doesn't everyone read like that?"

"I'll say they don't. I can't. You're something special, my dear."

He put his arm about her, and she, having become used to the gesture while dancing, seemed to think it nothing unusual while merely walking along the street. She snuggled up against him in delight.

When they reached her room, they continued their talk.

He put up one hand against her soft, warm cheek, which she rubbed gently against the tenderness of his touch. Suddenly he exerted a bit of pressure, turned her face toward his, and his lips touched hers.

Barbara squirmed a bit at the first contact, then as the

delight of it electrified her, she yielded herself completely. She returned his kiss with equal intensity.

"Oh, I like that," she purred when he released her at long last. "What was that?"

He was completely dumbfounded. Imagine anyone not knowing a thing like that! Her naivete and ignorance of commonplaces constantly put him off-balance.

"That, Little Miss Ignorance," he recovered at last, "was a kiss. Don't tell me you never heard of kissing."

"I think I read the word once, but I never knew what it was."

Of her own accord she put her arms about his neck and lifted her lips to his for another kiss.

WHEN Foxe finally reached his office the next morning, Barbara was at her desk, her electro-typewriter nearly dismantled, and herself busily engaged with a number of tools.

"What the . . . ?" He looked the amazement he felt.

She glanced up and her face was troubled.

"I don't know what happened. It was working perfectly when I finished last night, but this morning the moment I tried to use it there was a grinding noise, and it stopped and wouldn't start up again."

She soon had it completely apart, as he watched, and she began the rebuilding job, carefully scrutinising each piece as she replaced it. He remembered her saying she'd been taught to care for and repair her machine, and it was apparent she was as expert in this as she was in its use.

Suddenly she pounced on a bit of metal among the miscellany of parts strewn about her desk.

"That's strange," she pursed her lips as she studied it. "This doesn't belong in here. How do you suppose it got in my typewriter?"

His eyes narrowed. "Give it to me. I have an idea."

He left the room and ran into another. He strode up to the desk and addressed the brassy blonde behind it.

"Here's something of yours, Betty. You should be more careful where you drop things."

She looked up at him, startled. She started to deny that it was anything of her doing, but the determined, angry look in his eyes stopped the protest before it was uttered.

"Pack your things and get out!" he commanded. "You're all through here. I'll get your credits and your papers. Be ready to leave when I bring them back."

He stalked angrily from the room and into the auditor's office. When he returned he gave one more emphatic command.

"I told you once before to lay off Barbara Greenwood. Now I'm telling you again. You do one more thing, or say one word to or about her, and you'll be shipped to Mercury. Maybe that will be hot enough for a she-devil like you."

JAMES FOX came into John Storer's office one day, his face showing trouble.

"Chief, the big electronic calc's out of whack. Won't give the right answers at all."

The other came to his feet in consternation. As the two raced into the calc room, Foxe explained briefly.

They made a careful examination, and questioned the operators. It had suddenly gone hay-wire, that was all anyone knew. Why, was a mystery.

"Have to video Terra for a Technic to come and fix it," Storer grunted as the two returned to his office. "How you coming with those computations on the Monorail job?"

"Only about half done, and there's that Danaris Canal bridge job, too. That's barely started."

"Ouch! And there's a time-limit contract on both of them."

The answer from Terra was bad. It would be impossible, they reported, to send anyone to Mars to fix it for two months at the very earliest.

"Fat lot of good their guarantee does us," Foxe growled. "Well, we'll just have to get everyone possible working on the dope by hand. But we'll never make those jobs on time now."

"We've got to do it, somehow, someway, Jimmy. How, I don't know any more than you do. Just do the best you can. Hire any extra mathmen you can."

Foxe was visibly worried as he returned to his own office. Barbara, apparently quick to catch his moods, asked why. He explained.

"Can I help any?"

"Don't know how," was the lugubrious reply. But a moment later he brightened. "Hey, I forgot your special abilities. Drop your ordinary work, go to the library, and start honing up on calculus and tensor problems. In a few days you can really be of a lot of help."

Late that afternoon a brainstorm struck Foxe, and he ran into Storer's office, dragging Barbara with him.

"Say, Chief, I've got an idea. What say we let Bobby have a crack at fixing that big calc. She could study up on electronics for a few days, and I'll bet she can fix it!"

"Have you gone nuts, Jimmy?" The elder peered at him closely. "That's no job to entrust to an amateur. It's much too complicated. There're only about a dozen Technies on Terra who can fix a calculator."

"I'll still bet she could do it. Look, Chief! Bobby reads a page at a glance, and she has eidetic memory. She's trained to care for and repair machines, even if she hasn't yet tackled anything as complicated as that calc."

"You certainly have faith in her. What do you say, Barbara?"

Eyes gleaming in anticipation, she nodded vigorously. "I'd like to try it. I've worked on some pretty complicated electronic hodies."

Storer considered the matter for some time, frowning in concentration. They needed that machine, no fooling—how they needed it! Abruptly he came to a decision.

"It's worth taking a chance on. I'll get some of the best textbooks, and the blueprints of the machine."

For the next couple of days Barbara did little but read. Then she studied the blueprints of the huge, room-sized calculator. Finally, she spent one whole day

just looking at it and comparing it with the lay-out. Finally she said she thought she was ready to attempt the repair.

Carefully, methodically, she started dismantling the section thought to be off. She carefully marked each part she removed to correspond with a mark she put on the blueprints. Each she also thoroughly examined to see that it was still the correct shape and dimensions, and had been correctly booked-up according to the specifications.

Days passed, and still she worked ceaselessly. Other engineers and technicians, hearing about what she was attempting, came in briefly to watch. Mostly they pooh-pooed the idea that she could fix it. One or two grudgingly admitted she was going at it the right way, but doubted the final outcome.

"The big slugs are just jealous!" Foxe exploded. "None of 'em have brains enough to fix the thing, so they won't concede that anyone else can either."

"Calm down, Jimmy," Storer advised, laughing. "I'm satisfied now that Barbara knows what she's doing. Whether she gets it working or not is another matter. But I'm not taking her off the job."

But as the days grew many it was Barbara herself who became more and more distressed.

"I can't do it, Jimmy," she sobbed disconsolately in his arms. "It's just too much for me. I've learned the operating principle, but I'm just not enough of a technician to know how or where to look for the trouble."

"Nonsense," he declared loyally, kissing away her tears. "I'm betting on you, remember? My Little Miss Ignorance is going to show them all she has the best brain on this planet. You just keep plugging, Bobby—you'll win out!"

And so, plug along she did. Bit by bit she began to understand what was supposed to be accomplished by each of the intricate parts, and how it should work as a whole. She knew, now, exactly what to look for, and how to find it.

One glorious day, she found the trouble. As is so often

the case, it had been caused by a very small thing indeed. A wire-end had become unsoldered, and twisted about the wires of a nearby Selectron grid, short-circuiting it.

Quickly she fastened the wire where it belonged, replaced the burned-out unit, and began testing.

But that Selectron section would not work.

Over and over she adjusted and tested. It was out of phase somehow. It couldn't "remember" correctly the integer fed into it. Someway, before the electrons reached the grid, the bars and rings became negatively charged, and refused them.

She tried replacing various tubes, trying to see if one of those was damaged. As far as she could tell they were all right. She checked over all the nearby wiring circuits. Over and over she adjusted and tested. And again . . . and again . . .

FLOXE came in one day to find her working away, tears streaming from her eyes, saying tonelessly, "I can't do it; I can't do it"—but still working doggedly.

But perseverance, coupled with such tremendous latent mental abilities as Barbara was slowly beginning to demonstrate she possessed, must produce results. After she had made a hundred trials—and failures—she sat down and analysed what she had done each time, and the results she had obtained. Before long she had a patternised picture of why those various attempts had not worked.

Then, by pure deductive reasoning, she worked out the phasing that should be necessary. She found the cause, corrected it . . . and the Selectron "remembered"; positive charges remained positive, and the cells accepted them.

Satisfied at last, she began the tremendous job of reassembling the entire machine. After further arduous days it was done.

She came into Jimmy's office her dress torn and filthy with grease and grime. Her hair was a mess, her face

streaked with more of the grease and dirt. She was utterly weary, but managed a smile of satisfaction.

"Jimmy, it's all ready to try out. Oh, please, please, Jimmy, go quickly and see if it works. And Jimmy, I couldn't stand it if it doesn't!"

He ran into the calc room. When her slower steps had caught up with him he was feeding integrals of a tensor problem into the machine. Tubes lighted, relays clicked, and grids, condensers, coils and other parts seemed to be functioning as he watched closely. Finally the answer came out.

"Yeow! It works, darling, it works!"

He grabbed her around the waist. He swung her off the floor, hugged her and kissed her excitedly and enthusiastically.

John Storer and several others, hearing the commotion, came running in. Foxe triumphantly showed them the problem and the answer.

"It's a fairly simple one, I know, but it shows the thing's running. Somebody feed it a real'y hard one. I'm still bettin' it'll answer correctly."

It did.

Barbara was lauded and feted by the entire organisation. Yet through it all she remained demure and shy. She never, in any way, attempted to take advantage of the new stature she was now accorded, although her pleasure in their praise was evident.

John Storer began the habit of calling her often into his private office, not only for more and more exacting work—she was promoted from a mere typist's job—but just to talk to her. It was clear that he, too, was falling under the spell of her charm, and had a real respect for her growing mental abilities.

Foxe and Barbara continued to go around together during some of their free hours, while their time together in the office was a continual delight because of their enjoyment of each other's fine personality.

They went to ball games, to lectures, to concerts, to the video, and for long walks during which they talked

with increasing intimacy on almost every subject under distant Sol.

Because of the pleasure sensations she received from these new cultural experiences, and from the new sciences she was discovering and studying from books, Barbara paid little attention to her physical surroundings. The fact that she was on an alien planet apparently meant nothing to her. The ancient ruins she gave scarcely a glance. The ever-present iron-rust sand received no notice. Her work, music, dancing, study . . . and her companionship with Jimmy . . . these were now her life.

"I get more amazed every day at the simple, ordinary things about which Barbara has never heard," Foxe said to John Storer one day, as they were talking in the latter's office. "I just can't imagine anyone, anywhere, leading such a sheltered life as she must have done, to be so ignorant of so many commonplace things."

"I don't know what sort of a school she went to," the elder replied thoughtfully, "but it certainly didn't teach her much about life. Just the things she needed for her work, apparently. I think it was a mistake."

"You and me both, Chief. But it is certainly wonderful the way she grasps the essential details of a new subject, once it's presented to her. What a brain! I sometimes almost have a feeling of inferiority when I see how that flashing mind of hers digests facts so swiftly."

It was, indeed, becoming plain that Barbara was becoming far more than the "Little Miss Ignorance" Foxe still affectionately called her. With growing knowledge, and with the realisation that she could do such exacting things as fixing that calculator, she gradually lost some of her timidity, yet never overcame her endearing modesty.

THEY were returning in a taxi from another evening excursion, and as was now usual, he kissed her.

Suddenly he straightened with determination.

"Bobby, darling, I must have you all for myself for always. Not just during work and these too-short

evening hours once or twice a week. I want to marry you."

At these words she shrank back into the far corner of the seat. Her eyes clouded with tears of pain and shock. Her body shuddered as though agued.

"Oh, no, Jimmy! No! You can't mean that!"

He looked at her with puzzled eyes. He'd never been so startled by anyone's reaction.

His hands moved aimlessly toward her, but this time without touching.

"Why, Bohhy, why not? We've so much in common. We always have such fun together. And you must know how I feel about you. I haven't said it before in words, I know. But I'm sure my every look and action must have told you how much I love you."

She gave a little moan of pain and shook her head in slow negation. Her curls danced even while the pain in her beautiful eyes deepened.

"But I never did, Jimmy," the small voice was a wail. "I'd not have continued going out with you if I'd known. You *must* believe that!"

"But why, darling? We'd fit so perfectly together. It's been that way ever since the first day we met. Remember?"

"I thought you *knew*, Jimmy. Honestly, I thought you *knew*!"

The car stopped before her apartment house. She jumped out, and held the door so he couldn't follow.

"You go ask Mr. Storer. He'll tell you why I can't possibly marry you. I'm sure he knows."

She turned and ran swiftly into the house.

He sat silently for a moment. *What* was he supposed to have known? Finally he gave his chief's address to the driver.

"What on Earth, or Mars, rather, makes you get me out of bed at this hour?" Storer asked, admitting him to his apartment.

"It's Barbara," said Foxe. "I'm all at sea, and she said you'd know the answer."

"Answer to what?"

"Well, I asked her to marry me, tonight, and she broke it off sharp, and ran, saying it was impossible, and didn't I know why she couldn't possibly marry me."

Storer looked puzzled. "Should I know why?"

"Apparently. Up to now it's always been her that didn't seem to know much about anything, just as if they never taught her at school; and now, for the first time, she accuses me of not knowing something. I . . ."

Storer looked startled. "Jimmy! You're right. There were dozens of little primary things she didn't know. As if she'd missed out on the elementary classes. Can it be . . ."

Foxe paled. "You don't mean that she . . ."

Storer groaned. "Of course! That's it. She naturally wouldn't know about the rest of us, if she missed her first grades. Heavens, Jimmy, no telling what she'll do. She might try anything, without the primary emotional foundations she should have."

Storer dived for his clothes. "We've got to get to her!"

In a moment he was ready, and together the pair of them dashed to the street, where the taxi still waited. Foxe gave Barbara's address. "Hurry, driver! It's a matter of life and death!"

Both men sat tense and silent as the taxi tore through the deserted streets. Neither spoke until the cab screeched to a halt before Barbara's apartment. Then they piled out and ran into the building. Foxe jabbed the bell under her name, and waited in an agony of suspense. There was no answer.

"Never mind that!" snapped Storer. "We've got to break in."

He pushed one big shoulder against the door, and Foxe hurled his own weight against it also. The lock snapped and catapulted them inside. They raced down the hallway to Barbara's door, and Storer pounded on it. There was no response, and without waiting another second, they plunged against it and hurtled it inward.

Lying on the floor near the opposite wall was Barbara, her head wound around with a loose coil of copper wire. She was sobbing, and one white hand was pushing the

plug on an extension wire into the electric light socket.

"Quick!" shouted Storer. "She's trying to short-circuit her brain!"

Foxe hurled his body forward, kicked almost savagely at her hand, smashing the plug to fragments against the wall. Barbara screamed and went limp on the floor.

"Too late!" sobbed Foxe, dropping to the floor beside her and cradling her head in his arms.

"No," said Storer. "Even if a contact was made, it was only for a fraction of a second. There'd have been no time for a serious rise in temperature in the brain. She's only fainted, I'm sure."

It was true. Barbara's eyes opened almost instantly and she stared up at Foxe, then she threw herself into his arms and began sobbing wildly. "Why did you stop me, Jimmy? I can't marry you! Don't you know I'm only a robot? I'm not a human being at all."

"Of course not," said Storer, almost roughly. "You ignorant little android! Nor are we."

She stopped sobbing. Slowly she lifted her head and stared up at him.

"What?" she said uncomprehendingly. "You're not . . ."

". . . Human," finished Storer. "Naturally not. *Nobody* on Mars is human. Couldn't possibly live here if we were. We're all android robots. Didn't you learn that in your primary classes on Earth?"

"Primary classes . . ." she faltered. "What's a primary class . . .?"

Foxe clutched her to him and showered her lips with kisses. "Never mind what, Little Miss Ignorance," he said. "You missed them somehow, but it doesn't matter; I'm going to have a lot of fun teaching you what any android should have known the day she came off the assembly line!"

THE END

day to day in the U.S.A.

American Commentary

by Forrest J. Ackerman

SO this German-born French gazelle named Gisele, late of Indo-China, was dancing around my living-room till early in the morning.

What has this got to do with science fiction?

Well, I might use the weak excuse that sf author Chas. Beaumont was accompanying her dances, that sf artist Mel Hunter was modelling her in his mind's eye, that sf film director Curt Siodmak was auditioning her for a part in one of his future pictures. Actually, Gisele was entertaining these guests at my post-preview party of a new scientifilm, at the present time nameless, for which I have suggested such titles as: "The World at Bay," "Element of Fear," "How Long Left?"

It concerns a hungry metal (artificial element 161) which threatens to grow and throw the earth off balance. Appropriate to the air of authenticity with which the production has been imbued, I passed out copies of the current *Authentic* to Ray Bradbury, Ross Rocklynne, S. J. Byrne and the other celebrities present.



World Scene: In Italy, Festus Pragnell's *Green Man of Grappes* is being translated . . . Japan, I learn, several years ago produced a scientifilm, "The Transparent Man" . . . the Athenian Science Fiction Club has been established in Greece . . . Finland and South Africa have been broadcasting Bradbury yarns. Russia has produced a sf novel, *The Warm Earth* . . . Germany has produced its first anthology of American sf works, *The Conquest of Time and Space* . . . ditto Israel, with *Once Upon the Future* . . . the latest issue of the Mexican sf mag. reprints the well-known British *Menace from the Moon*.



The Chief Librarian of the University of California, in Los Angeles, recently invited me to lunch and discussed ways and means for the establishment of a science-fiction collection second to none. (Correction: Second to one!) That means *Authentic* will, as well as in my personal files, be officially preserved for posterity in America!



Proof of the growing popularity of our favourite literature is the fact that my Agency, which handles the literary material of some ninety or so sf authors, placed over twice as many manuscripts on the world market in 1952 as in 1951!

There is no truth to Check Harris's rumour that Horace Gold, alias Horrors Gboul, will edit a natural magazine called *Ghoulery* so good that fans will claim it *supernatural*. Nor will its subtitle, Walter Willis assures me, be "a worm's eye view of science fiction." Incidentally, this is my 13th column since I started writing for *Authentic*. From the first I have always sent it along entitled "Science Fiction News of the World," and Editor Campbell has just as regularly changed it to something else: "F. J. Ackerman writes from America," for instance. Someday the truth will be known, and the column changed to F. J. Ackerman Writes from Hunger!

(H.J.C.: We don't want your title being confused with one of our Sunday papers, Ferry!)

4aJ



FROM THE "LABORATORY"

"Rockets, as pictured in the world of television and the comic strips, are a blasting, clattering, crashing, hurtling, zipping, zooming affair.

"Actually, the chap all wired up in the pressure suit is currently playing second fiddle to the man in the laboratory coat. Case to point: To expedite the development of liquid rocket oxidisers, Arthur W. Rucker—a du Pont explosives researcher—needed a simple, rapid method for determining the solubility and freezing-point depression of gases in liquid nitrogen dioxide.

"No man-from-Mars apparatus for him. Researcher Rucker assembled an accurate apparatus using only standard equipment generally available in the laboratory. With it he showed that nitrous oxide does *not* form a compound with liquid nitrogen dioxide."

s-f handbook

Q-Value—Effective energy produced in a nuclear reaction expressed in terms of million electron volts.

Quantum—Amount of energy dependent upon the frequency of the radiation associated with electromagnetic waves by the relation $Q = h\nu$, where h is Planck's constant and ν is the frequency.

Radical—A group of atoms which retains its form throughout a chemical reaction.

Radioactivity—Emission of charged particles during the spontaneous decay of unstable atomic nuclei such as radium.

Radar vector—The line joining a planet with the centre of its orbital arc.

Rectifier—Apparatus for the conversion of an alternating current to a direct current.

Relativity—The concept that absolute motion cannot be determined, and the corollaries that follow from this. It has two basic axioms: (a), that the velocity of light is constant for

all observers; and (b), that natural laws operate in the same way for all observers. Most significant corollaries are: (a), the Fitzgerald-Lorentz contraction (see issue No. 24); (b), that the mass of a body increases with its velocity; and (c), that mass and energy are different aspects of the same thing. The special theory of relativity deals with the observable phenomena in two states in uniform motion relative to each other. The general theory of relativity concerns observable phenomena in systems not in uniform motion. Recent experimental work is throwing some doubt on the validity of certain relativistic dogmata.

Rest mass—Mass of a body when at rest, as opposed to its increasing mass with increasing velocity.

Resultant—The single force identical in effect with the effect of several co-acting forces.

Rocket—Device whose motive power comes from the internal recoil produced by internal combustion.

CRY CHAOS!

That's the title of the fast-moving, colourful novel by Dwight V. Swain in next month's issue. With it will be an amusing short story by A. E. van Vogt called *Haunted Atom*, a grim little piece, *The Toy*, by R. M. Rhodes, and Rick Conroy, author of *Martians in a Frozen World*, will, by popular request, contribute a short story called *Manna from Heaven*. Features will be better than ever. Illustrations will be superb. Watch out for it.

AUTHENTIC—A MONTHLY "MUST!"

The Final instalment
of our popular
serial . . .

Frontier Legion

by S. J. Bounds

Jan Arrowsmith, and his wife, Lydia, whom he left when she bore his daughter, are on a spaceship heading for Earth to frustrate Commandant Raymond's plan to seize power throughout the solar system. Bauer, Raymond's lieutenant, is a prisoner on the ship. Raymond calls Lydia on the space-radio and tells her that if Arrowsmith lands on Earth, her daughter Julia will die.

THE TWENTY-SECOND OF MARCH

RAYMOND'S ultimatum had surprise value.
Your daughter will die!

It was so unexpected that Jan Arrowsmith was momentarily shocked out of his complacent self-confidence. He lay on a soft rubber couch in the control room of the spaceship as it decelerated towards Earth, looking up at the image of Commandant Raymond in the vision screen and listening to his voice.

"I am not bluffing, Mrs. Arrowsmith—watch . . ."

The picture in the screen shifted. Raymond's moon-face—a bald head, fat and round, with beady eyes—disappeared, to be replaced by another scene. Arrowsmith saw a ring of grey-clad legionnaires, a white-faced nurse, and a small girl. His daughter! Arrowsmith stared with curiosity at the daughter he had never seen; she must be two years old now, he thought, it was two years since he'd walked out on Lydia. His attention switched to his wife.

Lydia Arrowsmith was tense in the padded seat before the control panel. He saw her lithe young body stiffen, her hands make tightly clenched fists, her face



Illustration by DAVIS

turn pale. Only the pressure from deceleration kept her in the seat at all; she cried out:

"Julia . . . Julia!"

The screen changed again. Commandant Raymond licked his pudgy lips with a small, pink tongue; his flashy voice was edged with cruelty.

"As you see, Mrs. Arrowsmith, I am not bluffing. Your daughter is in my hands—and will die, unless you obey my instructions. Turn the ship and circle the planet Mars. Your husband must not land on Earth's moon. I will tolerate no interference with my plans—keep your husband out of my way."

The vision screen went blank.

Arrowsmith laughed softly. This was Raymond's last trick, his ace card—but the card was a joker because Arrowsmith didn't care what happened to his daughter. The joke was on the Commandant; he had forgotten that the reason Arrowsmith had left his wife was *because* she was going to have a baby . . .

Jan Arrowsmith, super-egotist, cared only for himself. He was going to smash Frontier Legion and nothing would stop him. Nothing. He still writhed when he thought how Raymond had used him, made a fool of him, a dupe to lead suspicion towards Pluto and away from his own coup d'état. Arrowsmith's ego had suffered at Raymond's hands and the Commandant would pay for it. He could still remember Raymond's words: *You are the one man who can save Earth!* Well, he was . . . and he would, as Raymond would find to his cost.

Pressure eased gradually. The ship had stopped decelerating. Surprised, Arrowsmith turned to look at his wife—and suddenly realised why the Commandant had called her on the radio, and not himself. Lydia would do anything to save her daughter—even sacrifice the federation. Arrowsmith came off his couch in a hurry; she had to be stopped.

Lydia had a needle-gun in her hand. She pointed it at him and said, coldly:

"Stay where you are, Jan. You're not going to stop

me doing this. Julia comes first—I'm turning to circle Mars."

Arrowsmith halted in his stride; there could be no mistaking the look in his wife's dark eyes—she would shoot if he interfered. He said:

"You fool, Lydia! Raymond will kill your daughter anyway. You don't imagine he'll keep his word? Why should he? You're just a pawn he's pushing across the board. Keep the ship on course and let me deal with him. Perhaps I'll be in time to save Julia——"

"Perhaps." Lydia's voice was like the crack of a whip. "I don't trust Raymond, and I trust you even less. I haven't forgotten—or forgiven—your leaving me. I know just how much you care about your daughter . . . and this ship is not landing on the moon!"

Arrowsmith thought quickly. Time was passing. He had less than twenty-four hours to thwart Raymond's plan to seize power; but he couldn't do a thing while Lydia remained at the controls, gun in hand. He used the intercom mike in the wall:

"Hamish—bring Bauer to the control room."

Lydia said: "That'll do you no good."

Arrowsmith smiled; evidently she didn't guess his plan. Bauer was expendable; once he had the legionnaire between himself and his wife, it would be a simple matter to take the gun away from her. He studied her closely.

Her slim figure was clad in grey slacks and sweater; her raven-black hair tied with a mauve bow. There was an expression of determination to her pert, sun-tanned face, and her eyes, wide and dark, showed how easily she would use the gun if he made a wrong move. Julia would always come first with her . . .

He said: "You're very beautiful, Lydia," and took a step nearer. "I love you, of course, and——"

"Stay where you are, Jan. I don't want to kill you."

The door opened and Hamish pushed Bauer into the room. The harty miner who had saved Arrowsmith's life on Pluto stared at Lydia in amazement; a simple minded man, the sight of her pointing a needle-gun at

her husband was inexplicable. He stood, and stared open-mouthed.

Bauer's eyes glittered; he thought he saw a chance of turning the changed situation to his advantage. He was a slim man, dressed in the grey Legion uniform, and his face was sallow and unpleasant. He jerked out, in an emotionless monotone:

"Turn Arrowsmith over to me. I'll see you benefit by it."

Lydia ignored him. Arrowsmith moved easily, crossing the control room so that he was behind Raymond's lieutenant. He said:

"The Commandant has seized our daughter. What do you have to say about that, Bauer?"

The legionnaire sneered openly.

"My idea! Soon as Mrs. Arrowsmith boarded *Goliath*, I knew she'd cause trouble. I told Raymond to get the girl. Hostage. You're not so clever, Arrowsmith——"

"You did that!"

Lydia's gun shifted slightly, swinging to point at Bauer. There was tension in her body, the light of fury blazing in her eyes. She was helpless while Raymond held Julia, but Bauer . . . The legionnaire had not realised how close he stood to death. Arrowsmith did, and acted swiftly. He stepped forward, grabbing Bauer's arm; he twisted the arm, throwing the legionnaire across the room, at Lydia.

Her gun spurted an energy beam. Bauer caught it full in the chest and died with an expression of surprise on his thin face. He fell heavily against Lydia, carrying her off balance. Arrowsmith darted forward, smiling coldly, very sure of himself. He caught his wife's arm and wrenched the gun from her hand. Bauer hit the floor and Arrowsmith stumbled over his corpse; he fell, dragging Lydia down with him.

She gasped, struggling:

"No, Jan! Julia—I won't let you——"

Arrowsmith forgot she was a woman; he knew only that she was an obstacle to his plans. He drew back his arm and swung his balled fist to the point of her jaw.

She had no time to duck. Arrowsmith knocked her unconscious, and stood up, grinning. *He* was in command, now . . .

He thrust her gun into his belt and looked at Hamish. The miner wore a worried expression, almost shocked; he pushed a rough hand through his grey hair, almost stuttering:

"Your wife——"

Arrowsmith snapped: "She's gone crazy. Tried to stop me going after Raymond. I'll lock her in one of the empty cabins—you get rid of Bauer. Push him out of the airlock."

He found his wife surprisingly heavy, and had to drag her unconscious body along the floor. He went through the door, careless of Hamish's look of disgust, and dumped her in the first cabin he came to. He locked the door and returned to the control room. Hamish had taken Bauer aft, to get rid of the body.

Jan Arrowsmith slid into the padded seat before the instrument panel and disengaged the automatic pilot. He checked the ship's course, found it still centred on the Earth-moon system, and recommenced deceleration. He lay back in the seat as pressure began to build up again.

It was only a matter of hours now before he caught up with Commandant Raymond—hours to the showdown with Frontier Legion. Raymond had plenty to answer for and Arrowsmith would exact full payment. A smile creased his face as he imagined Raymond's surprise when he landed . . . *in full possession of his memory.*

The Commandant's scheme had been a clever one. Arrowsmith had been drugged into forgetfulness, then sent below Pluto's surface, to the Deep. Lydia had saved him then; and again when he was branded a deserter from the Legion. Yes, Raymond had been clever—but not clever enough. Bauer had spoken the trigger word, *Copernicus*, and Arrowsmith's memory had returned.

He knew now that the threat from Pluto was a blind to cover Raymond's bid for power, that the danger to Earth came from Frontier Legion. Bauer had paid the

penalty; but the Commandant was still free to carry out his coup—and still Arrowsmith did not know the exact nature of the plot against Earth.

Arrowsmith watched the visiscreen and saw Earth grow steadily larger as the spaceship approached. It was a blue-green sphere with the moon, a crescent of light, to one side. After a while, the moon was crowded out of the screen, which became filled by the bulk of the planet.

Raymond's plot centred about the federation, he knew that. For a century, ever since Earth had started colonizing the planets of the solar system, there had been bickering between the pioneers and central government. The colonies had grown away in outlook from the mother planet and interplanetary war seemed imminent. Then Neilson, Prime Minister of Terra, had started his scheme to federate the inner planets, Earth, Mars and Venus.

It would be a good thing, Arrowsmith thought—but not for Raymond. Frontier Legion was composed of outcasts and wanted men, the scum of Earth; in the beginning, the force had been used to open up the planets for the colonists, but Raymond's methods had made him hated throughout the system. The new federation would certainly want to abolish Frontier Legion . . .

Earth was rushing up, filling the screen. Arrowsmith saw his own reflection, superimposed on the darkness of the Atlantic Ocean. His thinning hair, the lean features with protruding cheekbones, and lines etched about his mouth, proclaimed his thirty-five years. Lydia, he remembered, was more than ten years younger. His forehead was large and bony, his deep-set eyes a pale blue; his pointed nose with its pinched nostrils added to an impression of asceticism. The reflection faded.

It was the twenty-second of March, the day for the signing of the federation; representatives of three worlds were meeting on Earth's moon—it would be there that Raymond must strike. Arrowsmith changed course. Earth veered off the visiscreen, to be replaced by the

moon. Time was running short and he must land directly on the moon.

He used the space radio, calling:

"Jan Arrowsmith, Security Agent, to Neilson, Prime Minister of Terra. Answer please."

He repeated his call for several minutes, then a reply came.

"Arrowsmith? This is Parker, of Security. Quote your number, please."

Arrowsmith laughed softly. Evidently Raymond had spread his story that he, Jan Arrowsmith, was an impostor . . . but now, he could recall his security number without trouble. Another of the Commandant's plans had failed.

He said: "Parker, my number is X-110. I must speak to Neilson immediately."

Parker's tone changed.

"Thank God it's you, Arrowsmith. No one here has the first idea of what's going to happen. Raymond came back and said you'd vanished, that an alien was posing as you. He——"

Arrowsmith interrupted: "Never mind that now. I want Neilson."

"Sorry, we've lost touch with him." Parker's voice had worry in it. "The Prime Minister has disappeared completely!"

Neilson disappeared! Arrowsmith thought quickly; this new set-back must be Raymond's work. What could he do without the Prime Minister's authority? He knew what Earth's government was like, conservative and slow to act; there would be endless red-tape to cut—and time was short. This was another trick of Raymond's to prevent counter-measures; he must have kidnapped Neilson and . . . no sense in worrying about that now.

He said: "Where are you speaking from, Parker?"

"Security Headquarters at Copernicus City."

"Good." Arrowsmith pictured a city under the huge glassite dome which covered the crater of Copernicus on Earth's moon. It was here the federation representatives

were meeting. He asked: "How many agents have you?"

"Fifty. And there's the Legion, of course."

Arrowsmith smiled grimly. Of course there would be the Legion, ready to strike for Commandant Raymond under the guise of waiting for an attack from Pluto. Fifty men weren't many with which to combat Frontier Legion—not many, but they'd have to manage.

"Listen, Parker—there is no menace from Pluto. Raymond and the Legion are the enemy. I'm coming in to land at Copernicus City—arm your men and meet me, ready for immediate action. Try to find out where Raymond is and what he's doing. How is the federation shaping?"

There was a long pause. Parker was obviously trying to adjust himself to the new situation; till now the security man had assumed that he would be fighting alongside the grey-clad legionnaires. Tenseness crept into his voice.

"By God, Arrowsmith, what are we going to do? Without Neilson, and with more than a hundred important officials from Mars and Venus to protect, we can't afford——"

Jan Arrowsmith cut in confidently: "Don't worry, Parker. *I* can handle it. Coming in now."

Yes, he thought, *he could handle Raymond*. And it would be a pleasure; he had been pushed around for too long—it was time to call the Commandant to account. The final reckoning was long overdue and Arrowsmith wanted to get his hands on the fat hoss of Frontier Legion.

The crater-studded surface of the moon filled the visiscreen. He pin-pointed Copernicus and sent the spaceship down at the shimmering, domed city. Landing jets fired and the spaceship settled to rest near one of the airlocks leading into the city. Pressure eased, and Arrowsmith left his padded couch.

Outside the ship, the glassite dome arched to an airless sky and distant stars dotted the black void of space. Eroded rock, pitted and scarred, formed a bleak and lifeless landscape, contrasting strangely with the close-

grouped buildings of Copernicus City and the bustle of people and machines.

Arrowsmith gave orders: "Harnish, you and your men stay aboard the ship. Keep the Legion out—I may want this ship in a hurry before long. I'm going into Copernicus. I'll take my wife with me."

He left the control room and moved along the passage to the cabin where he had imprisoned Lydia. He unlocked the door and went in. His wife was sitting on the edge of an acceleration couch, very still, her face pale. There was bitterness in the look she gave him, and in her tone of voice.

"So you landed on the moon, Jan. Doesn't your daughter's life mean anything to you?" She rose, advancing towards him. "I can't think why I married such a cold-blooded swine! And I loved you . . . you, the super-ego, the man who cares only for himself. I must have been mad! Julia——"

Arrowsmith snapped: "Stop whining! Julia may still be alive. She is the last card in Raymond's hand—he won't kill her while he believes you'll do anything to stop me interfering with his plan. Come on—we're going into Copernicus, after Raymond. I may need you again."

She followed him in silence to the airlock of the ship, where they climbed into spacesuits to cross the void to the city.

Arrowsmith said: "Stop thinking about Julia. She's only one person—the lives of millions are at stake. The federation must not be sabotaged."

They walked from the spaceship, over bare rock and bleached dust, and through the airlock of the city under the dome. Inside, Parker was waiting with a dozen armed men.

"What's the position now?" Arrowsmith asked tersely.

Parker was a blond-haired man with a clipped moustache; he had a harassed look.

"Raymond is at Legion headquarters; he can't leave

without my men spotting him. Neilson is still missing. And more and more representatives are arriving."

Arrowsmith looked at the busy streets across the square from the airlock.

"I don't see any legionnaires," he commented. "I had expected a hot reception."

Parker said: "That worries me. Obviously Raymond knows of your arrival—yet he does nothing. His men are inside Legion headquarters, except those on the ships. I can't understand it——"

Arrowsmith said, impatiently: "We can't afford to wait—we must attack first."

"But how? Raymond is inside a fortress, surrounded by armed men. We can't——"

"We can!" Arrowsmith had never felt so confident. "I have a plan. Raymond is holding my daughter as hostage—he believes that Lydia will stop me going after him because of her. We'll play on that. Lydia, use a public video box and call Raymond—tell him you'll deliver me into his hands, a prisoner, if he'll promise not to harm Julia. Fix a meeting place and suggest he sends some men."

Parker stared. "Then what?"

"You've enough agents to take care of Raymond's patrol. We'll switch uniforms—you'll escort me to Raymond. Once inside, shoot to kill!"

Parker turned to Lydia. He said:

"Arrange the meeting for suite 77 at the Rota hotel. In fifteen minutes."

Lydia Arrowsmith walked across the square to the nearest video box and called Legion headquarters; she gave her name and asked for the Commandant. Raymond answered immediately, his moon-face filling the tiny screen.

"Mrs. Arrowsmith, you have not obeyed my orders. Your husband——"

Lydia interrupted passionately: "Julia—my daughter—have you . . . ?"

"Not yet, Mrs. Arrowsmith. Your daughter is safe, but for how long depends on you."

Lydia said: "I couldn't stop my husband landing on the moon. But I can deliver him into your hands, and I'll do that if you return Julia."

Raymond's close-set eyes stared at her from the video screen. He licked the corners of his mouth, and said: "Don't try any tricks if you want the girl back."

"It's no trick." She meant it; willingly she would have sacrificed Jan Arrowsmith for her daughter. Her sincerity convinced the Commandant. "You'll find my husband in suite 77, at the Rota hotel. If you send over a patrol in fifteen minutes, you can pick him up."

"My men will leave at once," Raymond replied, and switched off.

Lydia returned to Arrowsmith and the security agents.

"All right?" Arrowsmith asked.

Lydia nodded. Parker guided them to a jet-car and the party sped away, through busy roadways, to the Rota hotel. It was a plastic and glass building, twenty stories high.

Parker explained: "We reserve suite 77 for undercover work—not even Raymond knows that Security has a permanent agency there. You'll find the place fully equipped."

They took the elevator to the third floor and settled to wait for the Legion patrol. Parker and his men dispersed to take up secret positions; only Arrowsmith and Lydia remained in view. They did not have long to wait.

Raymond's men arrived in less than the scheduled fifteen minutes, and they did not bother to knock before entering. The door opened and a dozen men crowded in, guns in their hands. The patrol leader started to speak:

"Don't move. We——"

He never finished. Both Arrowsmith and his wife held filter masks over their faces as a narcotic gas flooded the room. The legionnaires sprawled on the floor, unconscious. Parker cleared the suite of gas in a few minutes and his agents stripped off the legionnaires' uniforms and dressed in them.

Lydia said: "If Raymond has a spy-ray trained on this room——"

"No chance of that," Parker answered. "The whole suite is screened."

Twelve security agents, dressed in the Legion grey, escorted Arrowsmith and Lydia to waiting cars. They drove through the streets of Copernicus City, past the huge ball where the representatives of three planets were gathering to sign the federation documents, and on to Frontier Legion headquarters.

It was built to the same plan as the outpost on Pluto, a stone fortress, high-walled, with a grey, silver and black flag hanging limply from a tall mast. The sentries on the gate passed the cars without investigation, and they drove across the gravel square to the administration block.

The fortress was strangely quiet, deserted. Apart from the sentries on the main gate, they saw no sign of life.

"I don't like the look of this," Parker said, frowning.

Whatever is due to happen, Arrowsmith thought, is coming very soon.

They went into the administration block, towards Raymond's private office. There were two guards—both in spacesuits. Parker's men rayed them before they had the chance to give an alarm.

Why were the legionnaires wearing spacesuits? Arrowsmith visualized the city under the glassite dome—outside an airless void; and life inside the dome supported by an automatic chemical plant which manufactured an atmosphere equivalent to that of Earth. If anything happened to that plant . . .

Parker's thoughts took the same line. He said:

"It's impossible! There are too many safety precautions—and I doubled the guard at the plant. Raymond can't interfere with the air supply, I'm sure of that."

"Glassite is tough stuff," Arrowsmith murmured, thinking aloud. "Nothing short of an atomic blast would split the dome—and if Raymond were planning that, he wouldn't be here now. Too much radio-activity

afterwards. We must move carefully until we're sure what his game is. All right, let's go in."

Parker pushed open the door of Raymond's private sanctum and marched Arrowsmith and Lydia into the room. There were four spacesuited legionnaires, all with needle-guns ready for action. Commandant Raymond's fat hulk was similarly encased in a spacesuit; through the transparent hood, his bald head shone and his heavy eyes fixed on Arrowsmith, flicking across to Lydia. He did not seem aware that the men in grey were not those he had sent to suite 77.

"Ah, Mrs. Arrowsmith—this is a pleasure. I'm glad to see you've kept your side of the bargain."

He drew his own gun and pointed it at Jan Arrowsmith.

"I should have killed you aboard the *Goliath*," he said softly, "and saved myself a lot of worry. However, you will cause me no further trouble . . ."

Arrowsmith's lips curled in disgust. Raymond was so far beneath his notice that to kill him would be like stepping on a slug. It was a pity the Commandant was not worthy of his attention.

Lydia broke in. "Julia—my daughter—she's all right?"

"In perfect health," Raymond assured her. His flashy voice had a metallic tone through the microphone in his helmet. "We shall join her at once—her and Neilson. I have the Prime Minister here, too."

Arrowsmith said: "What are you planning, Commandant?"

Raymond smiled.

"You'll see—in due course. I have been waiting for you to arrive; it would not have suited me to have you miss the final blow. Now, thanks to your wife, we can proceed." He glanced at Parker. "Dismiss your men. Board the spaceships."

Parker hesitated, looking to Arrowsmith. At a nod, the security agents left. Arrowsmith knew they would return after taking care of the sentries. Meanwhile, he and Lydia were alone with Raymond and four armed killers.

Raymond said: "To the tower!"

They crossed the square to a high tower in the centre of the fortress and used the elevator to reach the top floor. Neilson and Julia were alone, chained to the wall, and a strange machine stood in the centre of the room. Arrowsmith tensed: *This was it!*

Neilson was in his sixties, a white-haired man with strong lines etched in his face. His voice had sadness in it.

"So they got you too, Jan?"

Arrowsmith did not reply; he was busy studying the room and the machine it contained. Lydia crossed to her daughter, anger flushing her cheeks. She wheeled on Raymond, snapping:

"You swine! Shackling a young child that way. You——"

The Commandant chuckled.

"In a few more minutes it will not matter, Mrs. Arrowsmith. I regret I cannot allow you to leave here after all. However, you have the privilege of dying with your daughter . . ."

Arrowsmith moved his position so that he could see Raymond close to the machine. The four guards were grouped to one side.

He murmured, just loud enough for Lydia to hear him: "Take four."

She would know what to do when he gave the signal—and Raymond did not realize they were both armed; he assumed the men he had sent to suite 77 would disarm his prisoners.

Arrowsmith said: "Tell us what you're going to do, Commandant."

Raymond moved a switch at the side of the machine. A warning light came on; a needle crept steadily across an instrument dial; the air hummed with electric tension. The humming changed to a high-pitched whine that faded to silence.

Raymond said: "My plan is very simple. This machine is a source of vibration, a high-frequency oscillator. You cannot hear it now, but I assure you it is still operating—the sound waves transmitted are of such high frequency

as to be inaudible to human ears. Watch the needle move across the dial—watch it approach the red line. *That red line denotes the frequency which will disintegrate glassite . . . you can guess the rest.*"

Yes, Arrowsmith thought, *he could guess the rest.* The classic example was the note of a violin which would shatter a wine glass. Raymond had built a machine to produce a similar frequency for the glassite dome over Copernicus City. When the needle hit the red line, the dome would shatter to atoms and the air rush out; anyone not in a spacesuit would die in seconds. Every member of the three governments at the federation meeting . . . and three worlds would be reduced to anarchy at a single stroke. Raymond, with Frontier Legion to enforce his orders, would declare a dictatorship which would spread throughout the solar system.

Jan Arrowsmith laughed, swaggering forward. His moment had come—his hand went into his pocket, grasped the hilt of the needle-gun there as he shouted to his wife:

"Take four . . . now!"

Arrowsmith fired without taking the gun from his pocket; his first shot hurt clean through Raymond's chest, killing him instantly; he brought his gun to bear on the oscillator until it was a fused mass of wiring, a dead machine that could never produce the evil result for which it had been built. At the same moment, Lydia's gun spouted an energy beam that sprayed the four legionnaires. The action was over in a fraction of a second and Frontier Legion was no longer a menace. The federation would go through, bringing a new era of peace and prosperity to the peoples of the solar system. *Jan Arrowsmith had never felt better in his life.*

LYDIA ARROWSMITH sat with her two-year-old daughter before a video screen, twenty-four hours later. Neilson had been speaking, telling of the success of the federation and how Raymond's plot had been foiled by Security Agent X-110. He introduced Arrowsmith to a grateful and admiring public.

Lydia said: "That's your father, Julia—a wonderful man."

After the cheers died away, Arrowsmith spoke:

"This is the greatest moment in my life. Always I shall look back at the time when I, alone and unaided, saved the federation of three worlds and the system from slavery. Of course, it was easy enough for me . . ."

Julia said: "Daddy come home, now?"

Lydia did not reply. She switched off the broadcast, tired of Arrowsmith's self-conceit. He made no mention of the help she had given him—she might not have existed for all the public knew. The super-ego had forgotten her completely . . .

Julia repeated: "Daddy come home now?"

"No, not yet," Lydia murmured, holding the small girl tightly.

A sadness and a bitterness pervaded her being. *She knew that Jan Arrowsmith would never return. Never.*

THE END

(Copyright, 1953)



A new synchrotron is in the design stage in the United States utilizing a recently discovered method of focusing magnetic fields. It is estimated that the new machine will accelerate electrons to ten billion electron-volts. This will considerably widen the practical scope of subatomic physics and may cast more light on the problem of gravitation.

THE ROSE

(Continued from page 29.)

their creations in precisely the same manner and with precisely the same result as when Boyle compressed his gases. And the method was long old when *they* were young. It was old when the Ming artists were painting the harest suggestions of landscapes on the disproportionate backgrounds of their vases. The Shah Jahan was aware of it when he designed the long eye-restraining reflecting pool before the Taj Mahal. The Greek tragedians knew it. Sophocles' *Oedipus* is still unparalleled in its suspensive pacing toward climax. Solomon's imported Chaldean architects knew the effect to be gained by spacing the Holy of Holies at a distance from the temple pylae, and the Cro-Magnard magicians with malice aforethought painted their marvellous animal scenes only in the most inaccessible crannies of their limestone caves."

Martha Jacques smiled coldly. "Drivel, drivel, drivel. But never mind. One of these days soon I'll produce evidence you'll be *forced* to admit art can't touch."

"If you're talking about Sciomnia, there's *real* nonsense for you," countered Jacques amiably. "Really, Martha, it's a frightful waste of time to reconcile biological theory with the unified field theory of Einstein, which itself merely reconciles the relativity and quantum theories, a futile gesture in the first place. Before Einstein announced *his* unified theory in 1949, the professors handled the problem very neatly. They taught the quantum theory on Mondays, Wednesdays and Fridays and the relativity theory on Tuesdays, Thursdays and Saturdays. On the Sabbath they rested in front of their television sets. What's the good of Sciomnia, anyway?"

"It's the final summation of all physical and biological knowledge," retorted Martha Jacques. "And as such, Sciomnia represents the highest possible aim of human

endeavour. Man's goal in life is to understand his environment, to analyse it to the last iota—to know what he controls. The first person to understand Sciomnia may well rule not only this planet, but the whole galaxy—not that he'd want to, but he could. That person may not be me—but will certainly be a scientist, and not an irresponsible artist."

"But Martha," protested Jacques. "Where did you pick up such a weird philosophy? The highest aim of man is *not* to analyse, but to synthesise—to *create*. If you ever solve all of the nineteen sub-equations of Sciomnia, you'll be at a dead end. There'll be nothing left to analyse. As Dr. Bell the psychogeneticist says, over-specialisation, be it mental, as in the human scientist, or dental, as in the sabre-tooth tiger, is just a synonym for extinction. But if we continue to create, we shall eventually discover how to transcend——"

Grade coughed, and Martha Jacques cut in tersely: "Never mind what Dr. Bell says. Ruy, have you ever seen this woman before?"

"The rose hush? Hmm." He stepped over to Anna and looked squarely down at her face. She flushed and looked away. He circled her in slow, critical appraisal, like a prospective buyer in a slave market of ancient Baghdad. "Hmm," he repeated doubtfully.

Anna breathed faster; her cheeks were the hue of heats. But she couldn't work up any sense of indignity. On the contrary, there was something illogically delicious about being visually pawed and handled by this strange loering creature.

Then she jerked visibly. What hypnotic insanity was this? This man held her life in the palm of his hand. If he acknowledged her, the vindictive creature who passed as his wife would crush her professionally. If he denied her, they'd know he was lying to save her—and the consequences might prove even less pleasant. And what difference would her ruin make to *him*? She had sensed at once his monumental selfishness. And even if that conceit, that gorgeous self-love urged him to preserve her for her hypothetical value in finishing up the Rose

*Illustration by FISCHER*

score, she didn't see how he was going to manage it.

"Do you recognise her, Mr. Jacques," demanded Grade.

"I do," came the solemn reply.

Anna stiffened.

Martha Jacques smiled thinly. "Who is she?"

"Miss Ethel Twinkham, my old spelling teacher. How are you, Miss Twinkham? What brings you out of retirement?"

"I'm not Miss Twinkham," said Anna dryly. "My name is Anna van Tuyt. For your information, we met last night in the Via Rosa."

"Oh! Of course!" He laughed happily. "I seem to remember now, quite indistinctly. And I want to apologise, Miss Twinkham. My behaviour was execrable. I suppose. Anyway, if you will just leave the bill for

damages with Mrs. Jacques, her lawyer will take care of everything. You can even throw in ten per cent. for mental anguish."

Anna felt like clapping her hands in glee. The whole Security office was no match for this fiend.

"You're getting last night mixed up with the night before," snapped Martha Jacques. "You met Miss van Tuyl last night. You were with her several hours. Don't lie about it."

Again Ruy Jacques peered earnestly into Anna's face. He finally shook his head. "Last night? Well, I can't deny it. Guess you'll have to pay up, Martha. Her face is familiar, but I just can't remember what I did to make her mad. The bucket of paint and the slumming dowager was *last* week, wasn't it?"

Anna smiled. "You didn't injure me. We simply danced together on the square, that's all. I'm here at Mrs. Jacques' request." From the corner of her eye she watched Martha Jacques and the colonel exchange questioning glances, as if to say, "Perhaps there is really nothing between them."

But the scientist was not completely satisfied. She turned her eyes on her husband. "It's a strange coincidence that you should come just at this time. Exactly why *are* you here, if not to becloud the issue of this woman and your future psychiatric treatment? Why don't you answer? What is the matter with you?"

For Ruy Jacques stood there, swaying like a stricken satyr, his eyes coals of pain in a face of anguished flames. He contorted backward once, as though attempting to placate furious fangs tearing at the hump on his back.

Anna leaped to catch him as he collapsed.

He lay cupped in her lap moaning voicelessly. Something in his hump, which lay against her left breast, seethed and raged like a genie locked in a bottle.

"Colonel Grade," said the psychiatrist quietly, "you will order an ambulance. I must analyse this pain syndrome at the clinic immediately."

Ruy Jacques was hers.

"THANKS awfully for coming, Matt," said Anna warmly.

"Glad to, honey." He looked down at the prone figure on the clinic cot. "How's our friend?"

"Still unconscious, and under general analgesic. I called you in because I want to air some ideas about this man that scare me when I think about them alone."

The psychogeneticist adjusted his spectacles with elaborate casualness. "Really? Then you think you've found what's wrong with him? Why he can't read or write?"

"Does it have to be something *wrong*?"

"What else would you call it? A . . . *gift*?"

She studied him narrowly. "I might—and you might—if he got something in return for his loss. That would depend on whether there was a net gain, wouldn't it? And don't pretend you don't know what I'm talking about. Let's get it out in the open. You've known the Jacques—both of them—for years. You had me put on his case because you think he and I might find in the mind and body of the other a mutual solution to our identical aberrations. Well?"

Bell tapped imperturbably at his cigar. "As you say, the question is, whether he got enough in return—enough to compensate for his lost skills."

She gave him a baffled look. "All right, then, I'll do the talking. Ruy Jacques opened Grade's private door, when Grade alone knew the combination. And when he got in the room with us, he knew what we had been talking about. It was just as though it had all been written out for him, somehow. You'd have thought the lock combination had been pasted on the door, and that he'd looked over a transcript of our conversation."

"Only, he can't read," observed Bell.

"You mean, he can't read . . . *writing*."

"What else is there?"

"Possibly some sort of thought residuum . . . in *things*. Perhaps some message in the metal of Grade's door, and in certain objects in the room." She watched him

closely. "I see you aren't surprised. You've known this all along."

"I admit nothing. You, on the other hand, must admit that your theory of thought-reading is superficially fantastic."

"So would writing be—to a Neanderthal cave dweller. But tell me, Matt, where do our thoughts go after we think them? What is the extra-cranial fate of those feeble, intricate electric oscillations we pick up on the encephalograph? We know they can and do penetrate the skull, that they can pass through bone, like radio waves. Do they go on out into the universe forever? Or do dense substances like Grade's door eventually absorb them all? Do they set up their wispy patterns in metals, which then begin to vibrate in sympathy, like piano wires responding to a noise?"

Bell drew heavily on his cigar. "Seriously, I don't know. But I will say this: your theory is not inconsistent with certain psychogenetic predictions."

"Such as?"

"Eventual telemusical communication of all thought. The encephalograph, you know, looks oddly like a musical sound track. Oh, we can't expect to convert overnight to communication of pure thought by pure music. Naturally, crude transitional forms will intervene. But any type of direct idea transmission that involves the sending and receiving of rhythm and modulation as such is a cut higher than communication in a verbal medium, and may be a rudimentary step upward toward true musical communion, just as dawn man presaged true words with allusive, onomatopoeic monosyllables."

"There's your answer, then," said Anna. "Why should Ruy Jacques trouble to read, when every hit of metal around him is an open book?" She continued speculatively. "You might look at it this way. Our ancestors forgot how to swing through the trees when they learned how to walk erect. Their history is recapitulated in our very young. Almost immediately after birth, a human infant can hang by his hands, ape-like. And then, after a week or so, he forgets what no human infant ever

really needed to know. So now Ruy forgets how to read. A great pity. Perhaps. But if the world were peopled with Ruys, they wouldn't need to know how, for after the first few years of infancy, they'd learn to use their metal-empathic sense. They might even say, 'It's all very nice to be able to read and write and swing about in trees when you're *quite* young, but after all, one matures.' "

She pressed a button on the desk slide viewer that sat on a table by the artist's bed. "This is a radiographic slide of Ruy's cerebral hemispheres as viewed from above, probably old stuff to you. It shows that the 'horns' are not mere localised growths in the prefrontal area, but extend as slender tracts around the respective hemispheric peripheries to the visuo-sensory area of the occipital lobes, where they turn and enter the cerebral interior, there to merge in an enlarged hall-like juncture at a point over the cerebellum where the pineal 'eye', is ordinarily found."

"But the pineal is completely missing in the slide," demurred Bell.

"That's the question," countered Anna. "Is the pineal absent—or, are the 'horns' actually the pineal, enormously enlarged and bifurcated? I'm convinced that the latter is the fact. For reasons presently unknown to me, this heretofore small, obscure lobe has grown, bifurcated, and forced its destructive dual limbs not only through the soft cerebral tissue concerned with the ability to read, but also has gone on to skirt half the cerebral circumference to the forehead, where even the hard frontal bone of the skull has softened under its pressure." She looked at Bell closely. "I infer that it's just a question of time before I, too, forget how to read and write."

Bell's eyes drifted evasively to the immobile face of the unconscious artist. "But the number of neurons in a given mammalian brain remains constant after birth," he said. "These cells can throw out numerous dendrites and create increasingly complex neural patterns as the subject grows older, but he can't grow any more of the primary neurons."

"I know. That's the trouble. Ruy can't grow more brain, but he has." She touched her own 'horns' wonderingly. "And I guess I have, too. *What—?*"

Following Bell's glance, she bent over to inspect the artist's face, and started as from a physical blow.

Eyes like anguished talons were clutching hers.

His lips moved, and a harsh whisper swirled about her ears like a desolate wind: "... The Nightingale ... in death ... greater beauty unbearable ... but *watch ... THE ROSE!*"

White-faced, Anna staggered backwards through the door.

BELL'S hurried footsteps were just behind her as she burst into her office and collapsed on the consultation couch. Her eyes were shut tight, but over her laboured breathing she heard the psychogeneticist sit down and leisurely light another cigar.

Finally she opened her eyes. "Even you found out something that time. There's no use asking me what he meant."

"Isn't there? Who will dance the part of The Student on opening night?"

"Ruy. Only, he will really do little beyond provide support to the prima ballerina, The Nightingale, that is, at the beginning and end of the ballet."

"And who plays The Nightingale?"

"Ruy hired a professional—La Tanid."

Bell blew a careless cloud of smoke toward the ceiling. "Are you sure you aren't going to take the part?"

"The role is strenuous in the extreme. For me, it would be a physical impossibility."

"Now."

"What do you mean—*now*?"

He looked at her sharply. "You know very well what I mean. You know it so well your whole body is quivering. Your ballet première is four weeks off—but you know and I know that Ruy has already seen it. Interesting." He tapped coolly at his cigar. "*Almost as*

interesting as your belief he saw you playing the part of The Nightingale."

Anna clenched her fists. This must be faced rationally. She inhaled deeply, and slowly let her breath out. "How can even *he* see things that haven't happened yet?"

"I don't know for sure. But I can guess, and so could you if you'd calm down a bit. We do know that the pineal is a residuum of the single eye that our very remote sea-going ancestors had in the centre of their fishy foreheads. Suppose this fossil eye, now buried deep in the normal brain, were reactivated. What would we be able to see with it? Nothing spatial, nothing dependent on light stimuli. But let us approach the problem inductively. I shut one eye. The other can fix Anna van Tuyl in a depthless visual plane. But with two eyes I can follow you stereoscopically, as you move about in space. Thus, adding an eye adds a dimension. With the pineal as a third eye I should be able to follow you through time. So Ruy's awakened pineal should permit him at least a hazy glimpse of the future."

"What a marvellous—and terrible gift."

"But not without precedent," said Bell. "I suspect that a more or less reactivated pineal lies behind every case of clairvoyance collected in the annals of parapsychology. And I can think of at least one historical instance in which the pineal has actually tried to penetrate the forehead, though evidently only in monolobate form. All Buddhist statues carry a mark on the forehead symbolic of an 'inner eye.' From what we know now, Buddha's 'inner eye' was something more than symbolic."

"Granted. But a time-sensitive pineal still doesn't explain the pain in Ruy's hump. Nor the bump itself, for that matter."

"What," said Bell, "makes you think the hump is anything more than what it seems—a spinal disease characterised by a growth of laminated tissue?"

"It's not that simple, and you know it. You're familiar with 'phantom limb' cases, such as where an amputee retains an illusion of sensation or pain in the amputated hand or foot?"

He nodded.

She continued: "But you know, of course, that amputation isn't an absolute prerequisite to a 'phantom.' A child born armless may experience phantom limb sensations for years. Suppose such a child were thrust into some improbable armless society, and their psychiatrists tried to cast his sensory pattern into their own mould. How could the child explain to them the miracle of arms, hands, fingers—things of which he had occasional sensory intimations, but had never seen, and could hardly imagine? Ruy's case is analogous. He is four-limbed and presumably springs from normal stock. Hence the phantom sensations in his hump point toward a *potential organ*—a foreshadowing of the future, rather than toward memories of a limb once possessed. To use a brutish example, Ruy is like the tadpole rather than the snake. The snake had his legs briefly, during the evolutionary recapitulation of his embryo. The tadpole has yet to shed his tail and develop legs. But one might assume that each has some faint phantom sensoria of legs."

Bell appeared to consider this. "That still doesn't account for Ruy's pain. I wouldn't think the process of growing a tail would be painful for a tadpole, nor a phantom limb for Ruy—if it's inherent in his physical structure. But he that as it may, from all indications he is still going to be in considerable pain when that narcotic wears off. What are you going to do for him *then*? Section the ganglia leading to his hump?"

"Certainly not. Then he would *never* be able to grow that extra organ. Anyhow, even in normal phantom limb cases, cutting nerve tissue doesn't help. Excision of neuromas from limb stumps brings only temporary relief—and may actually aggravate a case of hyperesthesia. No, phantom pain sensations are central rather than peripheral. However, as a temporary analgesic I shall try a two per cent. solution of novocaine near the proper thoracic ganglia." She looked at her watch. "We'd better be getting back to him,"

ANNA withdrew the syringe needle from the man's side and rubbed the last puncture with an alcoholic swab.

"How do you feel, Ruy?" asked Bell.

The woman stooped beside the sterile linens and looked at the face of the prone man. "He doesn't," she said uneasily. "He's out cold again."

"Really?" Bell bent over beside her and reached for the man's pulse. "But it was only two per cent. novocaine. Most remarkable."

"I'll order a counter stimulant," said Anna nervously. "I don't like this."

"Ob, come, girl. Relax. Pulse and respiration normal. In fact, I think you're nearer collapse than he. This is very interesting . . ." His voice trailed off in musing surmise. "Look, Anna, there's nothing to keep both of us here. He's in no danger whatever. I've got to run along. I'm sure you can attend to him."

I know, she thought. You want me to be alone with him.

She acknowledged his suggestion with a reluctant nod of her head, and the door closed behind his chuckle.

For some moments thereafter she studied in deep abstraction the regular rise and fall of the man's chest.

So Ruy Jacques had set another medical precedent. He'd received a local anæsthetic that should have done nothing more than desensitise the deformed growth on his back for an hour or two. But here he lay, in apparent coma, just as though under a general cerebral anæsthetic.

Her frown deepened.

X-ray plates had showed his dorsal growth simply as a compacted mass of cartilagenous laminated tissue (the same as hers) penetrated here and there by neural ganglia. In deadening those ganglia she should have accomplished nothing more than local anæsthetisation of that tissue mass, in the same manner that one anæsthetises an arm or leg by deadening the appropriate spinal ganglion. But the actual result was not local, but general. It was as though one had administered a mild local to the radial nerve of the forearm to deaden pain

in the hand, but had instead anæsthetised the cerebrum.

And *that*, of course, was utterly senseless, completely incredible, because anæsthesia works from the higher neural centres down, not vice versa. Deadening a certain area of the parietal lobe could kill sensation in the radial nerve and the hand, but a hypo in the radial nerve wouldn't knock out the parietal lobe of the cerebrum, because the parietal organisation was neurally superior. Analogously, anæsthetising Ruy Jacques' hump shouldn't have deadened his entire cerebrum, because certainly his cerebrum was to be presumed neurally superior to that dorsal malformation.

To be presumed . . .

But with Ruy Jacques, presumptions were—invalid.

So *that* was what Bell had wanted her to discover. Like some sinister reptile of the Mesozoic, Ruy Jacques had *two* neural organisations, one in his skull and one on his back, the latter being superior to, and in some degree controlling, the one in his skull, just as the cerebral cortex in human beings and other higher animals assists and screens the work of the less intricate cerebellum, and just as the cerebellum governs the still more primitive medulla oblongata in the lower vertebrata, such as frogs and fishes. In anæsthetising his hump, she had disrupted communications in his highest centres of consciousness, and in anæsthetising the higher, dorsal centre, she had apparently simultaneously deactivated his 'normal' brain.

As full realisation came, she grew aware of a curious numbness in her thighs, and of faint overtones of mingled terror and awe in the giddy throbbing in her forehead. Slowly, she sank into the bedside chair.

For as this man was, so must she become. The day lay ahead when *her* pineal growths must stretch to the point of disrupting the grey matter in her occipital lobes, and destroy her ability to read. And the time must come, too, when *her* dorsal growth would inflame her whole body with its anguished writhing, as it had done his, and try with probable equal futility to hurst its hands.

And all of this must come—soon; before her ballet première, certainly. The enigmatic skein of the future would be bared to her evolving intellect even as it now was to Ruy Jacques'. She would find all the answers she sought . . . Dream's end . . . the Nightingale's death song . . . The Rose. And she would find them whether she wanted to or not.

She groaned uneasily.

At the sound, the man's eyelids seemed to tremble; his breathing slowed momentarily, then became faster.

She considered this in perplexity. He was unconscious, certainly; yet he made definite responses to aural stimuli. Possibly she had anæsthetised neither member of the hypothetical brain-pair, but had merely cut, temporarily, their lines of intercommunication, just as one might temporarily disorganise the brain of a laboratory animal by anæsthetising the pons Varolii linking the two cranial hemispheres.

Of one thing she was sure: Ruy Jacques, unconscious, and temporarily mentally disintegrate, was not going to conform to the behaviour long standardised for other unconscious and disintegrate mammals. Always one step beyond what she ever expected. Beyond man. Beyond genius.

She arose quietly and tiptoed the short distance to the bed.

When her lips were a few inches from the artist's right ear, she said softly: "What is your name?"

The prone figure stirred uneasily. His eyelids fluttered, but did not open. His wine-coloured lips parted, then shut, then opened again. His reply was a harsh, barely intelligible whisper: "Zhak."

"What are you doing?"

"Searching . . ."

"For what?"

"A red rose."

"There are many red roses."

Again his somnolent, metallic whisper: "No, there is but one."

She suddenly realised that her own voice was becoming

tense, shrill. She forced it back into a lower key. "Think of that rose. Can you see it?"

"Yes . . . yes!"

She cried: "*What is the rose?*"

It seemed that the narrow walls of the room would clamour forever their outraged metallic modesty, if something hadn't frightened away their pain. Ruy Jacques opened his eyes and struggled to rise on one elbow.

On his sweating forehead was a deep frown. But his eyes were apparently focused on nothing in particular, and despite his seemingly purposive motor reaction, she knew that actually her question had but thrown him deeper into his strange spell.

Swaying a little on the dubious support of his right elbow, he muttered: "You are not the rose . . . not yet . . . not yet . . ."

She gazed at him in shocked stupor as his eyes closed slowly and he slumped back on the sheet. For a long moment there was no sound in the room but his deep and rhythmic breathing.

WITHOUT turning from her glum perusal of the clinic grounds framed in her window, Anna threw the statement over her shoulder as Bell entered the office. "Your friend Jacques refuses to return for a check-up. I haven't seen him since he walked out a week ago."

"Is that fatal?"

She turned blood-shot eyes on him. "Not to Ruy."

The man's face twinkled. "He's your patient, isn't he? It's your duty to make a house call."

"I certainly shall. I was just going to call him on the visor to make an appointment."

"He doesn't have a visor. Everybody just walks in. There's something doing in his studio nearly every night. If you're hashful, I'll be glad to take you."

"No thanks. I'll go alone—early."

Bell chuckled. "I'll see you tonight."

NUMBER 98 was a sad, ramshackled, four-storey, plaster-front affair, evidently thrown up during the materials shortage of the late forties.

Anna took a deep breath, ignored the unsteadiness of her knees, and climbed the half dozen steps of the front stoop.

There seemed to be no exterior bell. Perhaps it was inside. She pushed the door in and the waning evening light followed her into the hall. From somewhere came a frantic barking, which was immediately silenced.

Anna peered uneasily up the rickety stairs, then whirled as a door opened behind her.

A fuzzy canine muzzle thrust itself out of the crack in the doorway and growled cautiously. And in the same crack, farther up, a dark wrinkled face looked out at her suspiciously. "Whaddaya want?"

Anna retreated half a step. "Does he bite?"

"Who, Mozart? Nah, he couldn't dent a hanana." The creature added with anile irrelevance. "Ruy gave him to me because Mozart's dog followed him to the grave."

"Then this is where Mr. Jacques lives?"

"Sure, fourth floor, but you're early." The door opened wider. "Say, haven't I seen you somewhere before?"

Recognition was simultaneous. It was that animated stack of purple dresses, the ancient vendress of love philters.

"Come in, dearie," purred the old one, "and I'll mix you up something special."

"Never mind," said Anna hurriedly. "I've got to see Mr. Jacques." She turned and ran toward the stairway.

A horrid floating cackle whipped and goaded her flight, until she stumbled out on the final landing and set up an insensate skirling on the first door she came to.

From within an irritated voice called: "Aren't you getting a little tired of that? Why don't you come in and rest your knuckles?"

"Oh." She felt faintly foolish. "It's me—Anna van Tuyt."

"Shall I take the door off its hinges, doctor?"

Anna turned the knob and stepped inside.

Ruy Jacques stood with his back to her, palette in hand, facing an easel bathed in the slanting shafts of the setting sun. He was apparently blocking in a caricature of a nude model lying, face averted, on a couch beyond the easel.

Anna felt a sharp pang of disappointment. She'd wanted him to herself a little while. Her glance flicked about the studio.

Framed canvasses obscured by dust were stacked helter-skelter about the walls of the big room. Here and there were hints of statuary. Behind a nearby screen the disarray of a cot peeped out at her. Beyond the screen was a wire-phono. In the opposite wall was a door that evidently opened into the model's dressing alcove. In the opposite corner stood a hattered electronic piano which she recognised as the Fourier audiosynthesiser type.

She gave an involuntary gasp as the figure of a man suddenly separated from the piano and bowed to her.

Colonel Grade.

So the lovely model with the invisible face must be—Martha Jacques.

There was no possibility of mistake, for now the model had turned her face a little, and was acknowledging Anna's faltering stare with complacent mockery.

Of all evenings, why did Martha Jacques have to pick *this* one?

The artist faced the easel again. His harsh jeer floated back to the psychiatrist: "Behold the perfect female body!"

Perhaps it was the way he said this that saved her. She had a fleeting suspicion that he had recognised her disappointment, had anticipated the depths of her gathering despair, and had deliberately shaken her back into reality.

In a few words he had home upon her the idea that his enormously complex mind contained neither love nor hate, even for his wife, and that while he found in

her a physical perfection suitable for transference to canvas or marble, that nevertheless he writhed in a secret torment over this very perfection, as though in essence the woman's physical beauty simply stated a lack he could not name, and might never know.

With a weary, futile motion he lay aside his brushes and palette. "Yes, Martha is perfect, physically and mentally, and knows it." He laughed brutally. "What she doesn't know, is that frozen beauty admits of no plastic play of meaning. There's nothing behind perfection, because it has no meaning but itself."

There was a clamour on the stairs. "Hah!" cried Jacques. "*More* early-comers. The word must have got around that Martha brought the liquor. School's out, Mart. Better hop into the alcove and get dressed."

Matthew Bell was among the early arrivals. His face lighted up when he saw Anna, then clouded when he picked out Grade and Martha Jacques.

Anna noticed that his mouth was twitching worriedly as he motioned to her.

"What's wrong?" she asked.

"Nothing—yet. But I wouldn't have let you come if I'd known *they'd* be here. Has Martha given you any trouble?"

"No. Why should she? I'm here ostensibly to observe Ruy in my professional capacity."

"You don't believe that, and if you get careless, *she* won't either. So watch your step with Ruy while Martha's around. And even when she's not around. Too many eyes here—Security men—Grade's crew. Just don't let Ruy involve you in anything that might attract attention. So much for that. Been here long?"

"I was the first guest—except for *her* and Grade."

"Hmm. I should have escorted you. Even though you're his psychiatrist, this sort of thing sets her to thinking."

"I can't see the harm of coming alone. It isn't as though Ruy were going to try to make love to me in front of all these people."

"That's exactly what it is as though!" He shook his

head and looked about him. "Believe me, I know him better than you. The man is insane . . . unpredictable."

Anna felt a tingle of anticipation . . . or was it of apprehension? "I'll be careful," she said.

"Then come on. If I can get Martha and Ruy into one of their eternal Science-versus-Art arguments, I believe they'll forget about you."

"I repeat," said Bell, "we are watching the germination of another Renaissance. The signs are unmistakable, and should be of great interest to practising sociologists and policemen." He turned from the little group beginning to gather about him and beamed artlessly at the passing face of Colonel Grade.

Grade paused. "And just what are the signs of a renaissance?" he demanded.

"Mainly climatic change and enormously increased leisure, Colonel. Either alone can make a big difference; combined, the result is multiplicative rather than additive."

Anna watched Bell's eyes rove the room and join with those of Martha Jacques, as he continued: "Take temperature. In seven thousand B.C. *homo sapiens*, even in the Mediterranean area, was a shivering nomad; fifteen or twenty centuries later a climatic upheaval had turned Mesopotamia, Egypt and the Yangtse valley into garden spots, and the first civilisations were born. Another warm period extending over several centuries and ending about twelve hundred A.D. launched the Italian Renaissance and the great Ottoman culture, before the temperature started falling again. Since the middle of the seventeenth century the mean temperature of New York City has been increasing at the rate of about one-tenth of a degree per year. In another century palm trees will be commonplace on Fifth Avenue." He broke off and bowed benignantly. "Hello, Mrs. Jacques. I was just mentioning that in past renaissances, mild climates and bounteous crops gave man leisure to think, and to create."

When the woman shrugged her shoulders and made a gesture as though to walk on, Bell continued hurriedly:

"Yes, those renaissances gave us the Partheon, *The Last Supper*, the Taj Mahal. Then, the artist was supreme. But this time it might not happen that way, because we face a simultaneous technologic and climatic optimum. Atomic energy has virtually abolished labour as such, but without the international leavening of common art that united the first Egyptian, Sumerian Chinese and Greek cities. Without pausing to consolidate his gains, the scientist rushes on to greater things, to Sciomnia, and to a Sciomic power source"—he exchanged a sidelong look with the woman scientist—"a machine which, we are informed, may overnight fling man toward the nearer stars. When that day comes, the artist is through . . . unless . . ."

"Unless what?" asked Martha Jacques coldly.

"Unless this Renaissance, sharpened and intensified as it has been by its double maxima of climate and science, is able to force a response comparable to that of the Aurignacian Renaissance of twenty-five thousand B.C., to wit, the flowering of the Cro-Magnon, the first of the modern men. Wouldn't it be ironic if our greatest scientist solved Sciomnia, only to come a cropper at the hands of what may prove to be one of the first primitive specimens of *homo superior*—her husband?"

Anna watched with interest as the psychogeneticist smiled engagingly at Martha Jacques's frowning face, while at the same time he looked beyond her to catch the eye of Ruy Jacques, who was plinking in apparent aimlessness at the keyboard of the Fourier piano.

Martha Jacques said curtly: "I'm afraid, Dr. Bell, that I can't get too excited about your Renaissance. When you come right down to it, local humanity, whether dominated by art or science, is nothing but a temporary surface scum on a primitive backwoods planet."

Bell nodded blandly. "To most scientists Earth is admittedly commonplace. Psychogeneticists, on the other hand, consider this planet and its people one of the wonders of the universe."

"Really?" asked Grade. "And just what have we got here that they don't have on Betelgeuse?"

"Three things," replied Bell. "One—Earth's atmosphere has enough carbon dioxide to grow the forest-spawning grounds of man's primate ancestors, thereby insuring an unspecialised, quasi-erect, manually-activated species capable of indefinite psychophysical development. It might take the saurian life of a desert planet another billion years to evolve an equal physical and mental structure. Two—that same atmosphere had a surface pressure of 760 mm. of mercury and a mean temperature of about 25 degrees Centigrade—excellent conditions for the transmission of sound, speech, and song; and those early men took to it like a duck to water. Compare the difficulty of communication by direct touching of antennae, as the arthropodic pseudo-hominal citizens of certain airless worlds must do. Three—the solar spectrum within its very short frequency range of 760 to 390 millimicrons offers seven colours of remarkable variety and contrast, which our ancestors quickly made their own. From the beginning, they could see that they moved in multichrome beauty. Consider the ultra-sophisticate dwelling in a dying sun system—and pity him, for he can see only red and a little infra red."

"If that's the only difference," snorted Grade, "I'd say you psychogeneticists were getting worked up over nothing."

Bell smiled past him at the approaching figure of Ruy Jacques. "You may be right, of course, Colonel, but I think you're missing the point. To the psychogeneticist it appears that terrestrial environment is promoting the evolution of a most extraordinary being—a type of *homo* whose energies beyond the barest necessities are devoted to strange, unproductive activities. And to what end? We don't know—yet. But we can guess. Give a psychogeneticist Eohippus and the grassy plains, and he'd predict the modern horse. Give him archeopteryx and a dense atmosphere, and he could imagine the swan. Give him *h. sapiens* and a two-day work week, or better yet, Ruy Jacques and a no-day work week, and what will he predict?"

"The poorhouse?" asked Jacques, sorrowfully.

Bell laughed. "Not quite. An evolutionary spurt, rather. As *sapiens* turns more and more into his abstract world of the arts, music in particular, the psychogeneticist foresees increased communication in terms of music. This might require certain cerebral realignments in *sapiens*, and perhaps the development of special membranous neural organs—which in turn might lead to completely new mental and physical abilities, and the conquest of new dimensions—just as the human tongue eventually developed from a tasting organ into a means of long distance vocal communication."

"Not even in Ruy's Science Art distrihes," said Mrs. Jacques, "have I heard greater nonsense. If this planet is to have any future worthy of the name, you can be sure it will be through the leadership of her scientists."

"I wouldn't be too sure," countered Bell. "The artist's place in society has advanced tremendously in the past half-century. And I mean the minor artist—who is identified simply by his profession and not by any exceptional reputation. In our own time we have seen the financier forced to extend social equality to the scientist. And today the palette and musical sketch pad are gradually toppling the test tube and the cyclotron from their pedestals. In the first Renaissance the merchant and soldier inherited the ruins of church and feudal empire; in this one we peer through the crumbling walls of capitalism and nationalism and see the artist . . . or the scientist . . . ready to emerge as the cream of society. The question is, *which one?*"

"For the sake of law and order," declared Colonel Grade, "it must be the scientist, working in the defence of his country. Think of the military insecurity of an art-dominated society. If——"

Ruy Jacques broke in: "There is only one point on which I must disagree with you." He turned a disarming smile on his wife. "I really don't see how the scientist fits into the picture at all. Do you, Martha? For the artist is *already* supreme. He dominates the scientist, and if he likes, he is perfectly able to draw upon his more sensitive intuition for those various restatements of

artistic principles that the scientists are forever trying to fob off on a decreasingly gullible public under the guise of novel scientific laws. I say that the artist is aware of those 'new' laws long before the scientist, and has the option of presenting them to the public in a pleasing art form or as a dry, abstruse equation. He may, like da Vinci, express his discovery of a beautiful curve in the form of a breath-taking spiral staircase in a chateau at Blois, or, like Dürer, he may analyse the curve mathematically and announce its logarithmic formula. In either event he anticipates Des Cartes, who was the first mathematician to rediscover the logarithmic spiral."

The woman laughed grimly. "All right. *You're* an artist. Just what scientific law have you discovered?"

"I have discovered," answered the artist with calm pride, "what will go down in history as 'Jacques' Law of Stellar Radiation'."

Anna and Bell exchanged glances. The older man's look of relief said plainly: 'The battle is joined; they'll forget you.'

Martha Jacques peered at the artist suspiciously. Anna could see that the woman was genuinely curious but caught between her desire to crush, to damn any such amateurish 'discovery' and her fear that she was being led into a trap. Anna herself, after studying the exaggerated innocence of the man's wide, unblinking eyes knew immediately that he was subtly enticing the woman out on the rotten limb of her own dry perfection.

In near-hypnosis Anna watched the man draw a sheet of paper from his pocket. She marvelled at the superb blend of diffidence and braggadocio with which he unfolded it and handed it to the woman scientist.

"Since I can't write, I had one of the fellows write it down for me, but I think he got it right," he explained. "As you see, it boils down to seven prime equations."

Anna watched a puzzled frown steal over the woman's brow. "But each of these equations expands into hundreds more, especially the seventh, which is the longest of them all." The frown deepened. "Very interesting. Already I see hints of the Russell diagram..."

The man started. "What! H. N. Russell, who classified stars into spectral classes? You mean he scooped me?"

"Only if your work is accurate, which I doubt."

The artist stammered: "But——"

"And here," she continued in crisp condemnation, "is nothing more than a restatement of the law of light-pencil wavering, which explains why stars twinkle and planets don't, and which has been known for two hundred years."

Ruy Jacques' face lengthened lugubriously.

The woman smiled grimly and pointed. "These parameters are just a poor approximation of the Bethe law of nuclear fission in stars—old since the thirties."

The man stared at the scathing finger. "Old . . .?"

"I fear so. But still not bad for an amateur. If you kept at this sort of thing all your life, you might eventually develop something novel. But this is a mere hodge-podge, a rehash of material any real scientist learned in his teens."

"But Martha," pleaded the artist, "surely it isn't *all* old?"

"I can't say with certainty, of course," returned the woman with malice-edged pleasure, "until I examine every sub-equation. I can only say that, fundamentally, scientists long ago anticipated the artist, represented by the great Ruy Jacques. In the aggregate, your amazing Law of Stellar Radiation has been known for two hundred years or more."

Even as the man stood there, as though momentarily stunned by the enormity of his defeat, Anna began to pity his wife.

The artist shrugged his shoulders wistfully. "Science versus Art. So the artist has given his all, and lost. Jacques' Law must sing its swan song, then be forever forgotten." He lifted a resigned face toward the scientist. "Would you, my dear, administer the *coup de grace* by setting up the proper coordinates in the Fourier audio-synthesiser?"

Anna wanted to lift a warning hand, cry out to the man that he was going too far, that the humiliation he

was preparing for his wife was unnecessary, unjust, and would but thicken the wall of hatred that cemented their antipodal souls together.

But it was too late. Martha Jacques was already walking toward the Fourier piano, and within seconds had set up the polar-defined data and had flipped the toggle switch. The psychiatrist found her mind and tongue to be literally paralysed by the swift movement of this unwitting drama, which was now toppling over the brink of its tragicomic climax.

A deep silence fell over the room.

Anna caught an impression of avid faces, most of whom—Jacques' most intimate friends—would understand the nature of his little playlet and would rub salt into the ahraded wound he was delivering his wife.

Then in the space of three seconds, it was over.

The Fourier-piano had synthesised the seven equations, six short, one long, into their tonal equivalents, and it was over.

Dorran, the orchestra leader, broke the uneasy stillness that followed. "I say, Ruy old chap," he blurted, "just what is the difference in 'Jacques' Law of Stellar Radiation' and 'Twinkle, twinkle, little star'?"

Anna, in mingled amusement and sympathy, watched the face of Martha Jacques slowly turn crimson.

The artist replied in amazement. "Why, now that you mention it, there does seem to be a little resemblance."

"It's a dead ringer!" cried a voice.

"'Twinkle, twinkle' is an old continental folk tune," volunteered another. "I once traced it from Haydn's 'Surprise Symphony' back to the fourteenth century."

"Oh, but that's quite impossible," protested Jacques. "Martha has just stated that science discovered it first, only two hundred years ago."

The woman's voice dripped aqua regia. "You planned this deliberately, just to humiliate me in front of these . . . these clowns."

"Martha, I assure you . . .!"

"I'm warning you for the last time, Ruy. If you ever again humiliate me, I'll probably kill you!"

Jacques hacked away in mock alarm until he was swallowed up in a swirl of laughter.

The group broke up, leaving the two women alone. Suddenly aware of Martha Jacques' bitter scrutiny, Anna flushed and turned toward her.

Martha Jacques said: "Why can't you make him come to his senses? I'm paying you enough."

Anna gave her a slow wry smile. "Then I'll need your help. And you aren't helping when you deprecate his sense of values—odd though they may seem to you."

"But Art is really so *foolish!* Science——"

Anna laughed shortly. "You see? Do you wonder he avoids you?"

"What would you do?"

"I?" Anna swallowed dryly.

Martha Jacques was watching her with narrowed eyes. "Yes, you. *If you wanted him?*"

Anna hesitated, breathing uneasily. Then gradually her eyes widened, became dreamy and full, like moons rising over the edge of some unknown, exotic land. Her lips opened with a nerveless fatalism. She didn't care what she said:

"I'd forget that I want, above all things, to be beautiful. I would think only of him. I'd wonder what he's thinking, and I'd forsake my mental integrity and try to think as he thinks. I'd learn to see through his eyes, and to hear through his ears. I'd sing over his successes, and hold my tongue when he failed. When he's moody and depressed, I wouldn't probe or insist that-I-could-help-you-if-you'd-only-let-me. Then——"

Martha Jacques snorted. "In short, you'd be nothing but a selfless shadow, devoid of personality or any mind or individuality of your own. That might be all right for one of your type. But for a Scientist, the very thought is ridiculous!"

The psychiatrist lifted her shoulders delicately. "I agree. It is ridiculous. What sane woman at the peak of her profession would suddenly toss up her career to merge—you'd say 'suhmerge'—her identity, her very

existence, with that of an utterly alien male mentality?"

"What woman, indeed?"

Anna mused to herself, and did not answer. Finally she said: "And yet, that's the price; take it or leave it, they say. What's a girl to do?"

"Stick up for her rights!" declared Martha Jacques spiritedly.

"All hail to unrewarding perseverance!" Ruy Jacques was back, swaying slightly. He pointed his half-filled glass toward the ceiling and shouted: "Friends! A toast! Let us drink to the two charter members of the Knights of the Crimson Grail." He bowed in saturnine mockery to his glowering wife. "To Martha! May she soon solve the Jacques Rosette and blast humanity into the heavens!"

Simultaneously he drank and held up a hand to silence the sudden spate of jeers and laughter. Then, turning toward the now apprehensive psychiatrist, he essayed a second how of such sweeping grandiosity that his glass was upset. As he straightened, however, he calmly traded glasses with her. "To my old school-teacher, Dr. van Tuyt. A nightingale whose secret ambition is to become as beautiful as a red red red rose. May Allah grant her prayers." He blinked at her beatifically in the sudden silence. "What was that comment, doctor?"

"I said you were a drunken idiot," replied Anna. "But let it pass." She was panting, her head whirling. She raised her voice to the growing cluster of faces. "Ladies and gentlemen, I offer you the third seeker of the grail! A truly great artist. Ruy Jacques, a child of the coming epoch, whose sole aim is not aimlessness, as he would like you to think, but a certain marvellous rose. Her curling petals shall be of subtle texture, yet firm withal, and brilliant red. It is this rose that he must find, to save his mind and body, and to put a soul in him."

"She's right!" cried the artist in dark glee. "To Ruy Jacques, then! Join in, everybody. The party's on Martha!"

He downed his glass, then turned a suddenly grave face to his audience. "But it's really such a pity in

Anna's case, isn't it? Because her cure is so simple."

The psychiatrist listened; her head was throbbing dizzily.

"As any *competent* psychiatrist could tell her," continued the artist mercilessly, "she has identified herself with the nightingale in her ballet. The nightingale isn't much to look at. On top it's a dirty brown; at bottom, you might say it's a drab grey. But ah! The soul of this plain little bird! Look into my soul, she pleads. Hold me in your strong arms, look into my soul, and think me as lovely as a red rose."

Even before he put his wine glass down on the table, Anna knew what was coming. She didn't need to watch the stiffening cheeks and flaring nostrils of Martha Jacques, nor the sudden flash of fear in Bell's eyes, to know what was going to happen next.

He held out his arms to her, his swart satyr-face nearly impassive save for its eternal suggestion of sardonic mockery.

"You're right," she whispered, half to him, half to some other part of her, listening, watching. "I *do* want you to hold me in your arms and think me beautiful. But you can't, because you don't love me. It won't work. Not yet. Here, I'll prove it."

As from miles and centuries away, she heard Grade's horrified gurgle.

But her trance held. She entered the embrace of Ruy Jacques, and held her face up to his as much as her spine would permit, and closed her eyes.

He kissed her quickly on the forehead and released her. "There! Cured!"

She stood back and surveyed him thoughtfully. "I wanted you to see for yourself, that nothing can be beautiful to you—at least not until you learn to regard someone else as highly as you do Ruy Jacques."

Bell had drawn close. His face was wet, grey. He whispered: "Are you two insane? Couldn't you save this sort of thing for a less crowded occasion?"

But Anna was rolling rudderless in a fatalistic calm. "I had to show him something. Here. Now. He might

never have tried it if he hadn't had an audience. Can you take me home now?"

"Worst thing possible," replied Bell agitatedly. "That'd just confirm Martha's suspicions." He looked around nervously. "She's gone. Don't know whether that's good or bad. But Grade's watching us. Ruy, if you've got the faintest intimations of decency, you'll wander over to that group of ladies and kiss a few of them. May throw Martha off the scent. Anna, you stay here. Keep talking. Try to toss it off as an amusing incident." He gave a short strained laugh. "Otherwise you're going to wind up as the First Martyr in the Cause of Art."

"I beg your pardon, Dr. van Tuyl."

It was Grade. His voice was brutally cold, and the syllables were clipped from his lips with a spine-tingling finality.

"Yes, Colonel?" said Anna nervously.

"The Security Bureau would like to ask you a few questions."

"Yes?"

Grade turned and stared icily at Bell. "It is preferred that the interrogation be conducted in private. It should not take long. If the lady would kindly step into the model's dressing room, my assistant will take over from there."

"Dr. van Tuyl was just leaving," said Bell huskily. "Did you have a coat, Anna?"

With a smooth unobtrusive motion Grade unsnapped the guard on his hip holster. "If Dr. van Tuyl leaves the dressing room within ten minutes, alone, she may depart from the studio in any manner she pleases."

Anna watched her friend's face become even paler. He wet his lips, then whispered. "I think you'd better go, Anna. Be careful."

THE room was small and nearly bare. Its sole furnishings were an ancient calendar, a clothes tree, a few stacks of dusty books, a table (bare save for a roll of canvas patching tape) and three chairs.

In one of the chairs, across the table, sat Martha Jacques.

She seemed almost to smile at Anna; but the amused curl of her beautiful lips was totally belied by her eyes, which pulsed hate with the paralysing force of physical blows.

In the other chair sat Willie the Cork, almost unrecognisable in his groomed neatness.

The psychiatrist brought her hand to her throat as though to restore her voice, and at the movement, she saw from the corner of her eye that Willie, in a lightning motion, had simultaneously thrust his hand into his coat pocket, invisible below the table. She slowly understood that he held a gun on her.

The man was the first to speak, and his voice was so crisp and incisive that she doubted her first intuitive recognition. "Obviously, I shall kill you if you attempt any unwise action. So please sit down, Dr. van Tuyl. Let us put our cards on the table."

It was too incredible, too unreal, to arouse any immediate sense of fear. In numb amazement she pulled out the chair and sat down.

"As you may have suspected for some time," continued the man curtly, "I am a Security agent."

Anna found her voice. "I know only that I am being forcibly detained. What do you want?"

"Information, doctor. What government do you represent?"

"None."

The man fairly purred. "Don't you realise, doctor, that as soon as you cease to answer responsively, I shall kill you?"

Anna van Tuyl looked from the man to the woman. She thought of circling hawks, and felt the intimations of terror. What could she have done to attract such wrathful attention? She didn't know. But then, *they* couldn't be sure about *her*, either. This man didn't want to kill her until he found out more. And by that time surely he'd see that it was all a mistake.

She said: "Either I am a psychiatrist attending a

special case, or I am not. I am in no position to prove the positive. Yet, by syllogistic law, you must accept it as a possibility until you prove the negative. Therefore, until you have given me an opportunity to explain or disprove any evidence to the contrary, you can never be certain in your own mind that I am other than what I claim to be."

The man smiled, almost genially. "Well put, doctor. I hope they've been paying you what you are worth." He bent forward suddenly. "Why are you trying to make Ruy Jacques fall in love with you?"

She stared back with widening eyes. "What did you say?"

"Why are you trying to make Ruy Jacques fall in love with you?"

She could meet his eyes squarely enough, but her voice was now very faint: "I didn't understand you at first. You said . . . that I'm trying to make him fall in love with me." She pondered this for a long wondering moment, as though the idea were utterly new. "And I guess . . . it's true."

The man looked blank, then smiled with sudden appreciation. "You *are* clever. Certainly, you're the first to try *that* line. Though I don't know what you expect to gain with your false candour."

"False? Didn't you mean it yourself? No, I see you didn't. But Mrs. Jacques does. And she hates me for it. But I'm just part of the bigger hate she keeps for *him*. Even her Sciomnia equation is just part of that hate. She isn't working on a biophysical weapon just because she's a patriot, but more to spite *him*, to show him that her science is superior to——"

Martha Jacques' hand lashed viciously across the little table and struck Anna in the mouth.

The man merely murmured: "Please control yourself a bit longer, Mrs. Jacques. Interruptions from outside would be most inconvenient at this point." His humourless eyes returned to Anna. "One evening a week ago, when Mr. Jacques was under your care at the clinic, you left stylus and paper with him."

Anna nodded. "I wanted him to attempt automatic writing."

"What is 'automatic writing'?"

"Simply writing done while the conscious mind is absorbed in a completely extraneous activity, such as music. Mr. Jacques was to focus his attention on certain music composed by me while holding stylus and paper in his lap. If his recent inability to read and write was caused by some psychic block, it was quite possible that his subconscious mind might by-pass the block, and he would write—just as one 'doodles' unconsciously when talking over the visor."

He thrust a sheet of paper at her. "Can you identify this?"

What was he driving at? She examined the sheet hesitantly. "It's just a blank sheet from my private monogrammed stationery. Where did you get it?"

"From the pad you left with Mr. Jacques."

"So?"

"We also found another sheet from the same pad, under Mr. Jacques' bed. It had some interesting writing on it."

"But Mr. Jacques personally reported nil results."

"He was probably right."

"But you said he wrote something?" she insisted; momentarily her personal danger faded before her professional interest.

"I didn't say *he* wrote anything."

"Wasn't it written with that same stylus?"

"It was. But I don't think he wrote it. It wasn't in his handwriting."

"That's often the case in automatic writing. The script is modified according to the personality of the dissociated subconscious unit. The alteration is sometimes so great as to be unrecognisable as the handwriting of the subject."

He peered at her keenly. "This script was perfectly recognisable, Dr. van Tuyt. I'm afraid you've made a grave blunder. Now, shall I tell you in *whose* handwriting?"

She listened to her own whisper: "Mine?"

"Yes."

"What does it say?"

"You know very well."

"But I don't." Her underclothing was sticking to her body with a damp clammy feeling. "At least you ought to give me a chance to explain it. May I see it?"

He regarded her thoughtfully for a moment, then reached into his pocket sheaf. "Here's an electrostat. The paper, texture, ink, everything, is a perfect copy of your original."

She studied the sheet with a puzzled frown. There were a few lines of scribblings in purple. But it wasn't in her handwriting. In fact, it wasn't even handwriting—just a mass of illegible scrawls!

Anna felt a thrill of fear. She stammered: "What are you trying to do?"

"You don't deny you wrote it?"

"Of course I deny it." She could no longer control the quaver in her voice. Her lips were leaden masses, her tongue a stone slab. "It's—unrecognisable . . ."

The Cork floated with sinister patience. "In the upper left hand corner is your monogram: 'A.v.T.', the same as on the first sheet. You will admit that, at least?"

For the first time, Anna really examined the presumed trio of initials enclosed in the familiar ellipse. The ellipse was there. But the print within it was—gibberish. She seized again at the first sheet—the blank one. The feel of the paper, even the smell, stamped it as genuine. It had been hers. But the monogram! "Oh no!" she whispered.

Her panic-stricken eyes flailed about the room. The calendar . . . same picture of the same cow . . . *but the rest . . . !* A stack of books in the corner . . . titled in gold leaf . . . gathering dust for months . . . the label on the roll of patching tape on the table . . . even the watch on her wrist.

Gibberish. She could no longer read. She had forgotten how. Her ironic gods had chosen this critical moment to blind her with their brilliant bounty.

Then take it! And play for time!

She wet trembling lips. "I'm unable to read. My reading glasses are in my bag, outside." She returned the script. "If you'd read it, I might recognise the contents."

The man said: "I thought you might try this, just to get my eyes off you. If you don't mind, I'll quote from memory:

"—what a queer climax for the Dream! Yet, inevitable. Art versus Science decrees that one of us must destroy the Sciomniac weapon; but that could wait until we become more numerous. So, what I do is for him alone, and his future depends on appreciating it. Thus, Science bows to Art, but even Art isn't all. The Student must know the one greater thing when he see the Nightingale dead, for only then will he recognise . . ."

He paused.

"Is that all?" asked Anna.

"That's all."

"Nothing about a . . . rose?"

"No. What is 'rose' a code word for?"

Death? mused Anna. Was the rose a cryptolalic synonym for the grave? She closed her eyes and shivered. Were those really *her* thoughts, impressed into the mind and wrist of Ruy Jacques from some grandstand seat at her own ballet three weeks hence? But after all, why was it so impossible? Coleridge claimed *Kowaku* had been dictated to him through automatic writing. And that English mystic, William Blake, freely acknowledged being the frequent amanuensis for an unseen personality. And there were numerous other cases. So, from some unseen time and place, the mind of Anna van Tuyl had been attuned to that of Ruy Jacques, and his mind had momentarily forgotten that both of them could no longer write, and had recorded a strange reverie.

It was then that she noticed the—whispers.

No—not whispers—not exactly. More like rippling vibrations, mingling, rising, falling. Her heart beats quickened when she realised that their eerie pattern was

soundless. It was as though something in her mind was suddenly vibrating *en rapport* with a subetheric world. Messages were beating at her for which she had no tongue or ear; they were beyond sound—beyond knowledge, and they swarmed dizzily around her from all directions. From the ring she wore. From the bronze buttons of her jacket. From the vertical steam piping in the corner. From the metal reflector of the ceiling light.

And the strongest and most meaningful of all showered steadily from the invisible weapon The Cork grasped in his coat pocket. Just as surely as though she had seen it done, she knew that the weapon had killed in the past. And not just once. She found herself attempting to unravel those thought residues of death—once—twice—three times . . . beyond which they faded away into steady, indecipherable time-mated violence.

And now that gun began to scream: "Kill! Kill! Kill!"

She passed her palm over her forehead. Her whole face was cold and wet. She swallowed noisily.

RUY JACQUES sat before the metal illuminator near his easel, apparently absorbed in the profound contemplation of his goatish features, and oblivious to the mounting gaiety about him. In reality he was almost completely lost in a soundless, sardonic glee over the triangular death-struggle that was nearing its climax beyond the inner wall of his studio, and which was magnified in his remarkable mind to an incredible degree by the paraboloid mirror of the illuminator.

Bell's low urgent voice began hacking at him again. "Her blood will be on your head. All you need to do is to go in there. Your wife wouldn't permit any shooting with you around."

The artist twitched his misshapen shoulders irritably. "Maybe. But why should I risk my skin for a silly little nightingale?"

"Can it be that your growth beyond *sapient* has served simply to sharpen your objectivity, to accentuate your inherent egregious want of identity with even the best

of your fellow creatures? Is the indifference that has driven Martha nearly insane in a bare decade now too ingrained to respond to the first known female of your own unique breed?" Bell sighed heavily. "You don't have to answer. The very senselessness of her impending murder amuses you. Your nightingale is about to be impaled on her thorn—for nothing—as always. Your sole regret at the moment is that you can't twit her with the assurance that you will study her corpse diligently to find there the rose you seek."

"Such unfeeling heartlessness," said Jacques in regretful agreement, "is only to be expected in one of Martha's blunderlings. I mean The Cork, of course. Doesn't he realise that Anna hasn't finished the score of her ballet? Evidently has no musical sense at all. I'll bet he was even turned down for the policemen's charity quarter. You're right, as usual, doc. We must punish such philistinism." He tugged at his chin, then rose from the folding stool.

"What are you going to do?" demanded the other sharply.

The artist weaved toward the phono cabinet. "Play a certain selection from Tchaikovski's *Sixth*. If Anna's half the girl you think, she and Peter Ilyitch will soon have Mari eating out of their hands."

Bell watching him in anxious, yet half-trusting frustration as the other selected a spool from his library of electronic recordings and inserted it into the playback sprocket. In mounting mystification, he saw Jacques turn up the volume control as far as it would go.

MURDER, a one-act play directed by Mrs. Jacques, thought Anna. With sound effects by Mr. Jacques. But the facts didn't fit. It was unthinkable that Ruy would do anything to accommodate his wife. If anything, he would try to thwart Martha. But what was his purpose in starting off in the finale of the first movement of the *Sixth*? Was there some message there that he was trying to get across to her?

There was. She had it. She was going to live. If—

"In a moment," she told The Cork in a tight voice, "you are going to snap off the safety catch of your pistol, revise slightly your estimated line of fire, and squeeze the trigger. Ordinarily you could accomplish all three acts in almost instantaneous sequence. At the present moment, if I tried to turn the table over on you, you could put a bullet in my head before I could get well started. But in another sixty seconds you will no longer have that advantage, because your motor nervous system will be labouring under the superimposed pattern of the extraordinary Second Movement of the symphony that we now hear from the studio."

The Cork started to smile, then he frowned faintly. "What do you mean?"

"All motor acts are carried out in simple rhythmic patterns. We walk in the two-four time of the march. We waltz, use a pickaxe, and manually grasp or replace objects in three-quarters rhythm."

"This nonsense is purely a play for time," interjected Martha Jacques. "Kill her."

"It is a fact," continued Anna hurriedly. (Would that Second Movement never begin?) "A decade ago, when there were still a few factories using hand-assembly methods, the workmen speeded their work by breaking down the task into these same elemental rhythms, aided by appropriate music." (There! It was beginning! The immortal genius of that suicidal Russian was reaching across a century to save her!) "It so happens that the music you are hearing *now* is the Second Movement that I mentioned, and it's neither two-four nor three-quarters, but *five-four*, an oriental rhythm that gives difficulty even to skilled occidental musicians and dancers. Subconsciously you are going to try to break it down into the only rhythms to which your motor nervous system is attuned. But you can't. Nor can *any* occidental, even a professional dancer, unless he has had special training"—her voice wobbled slightly—"in Delcrozian eurythmics."

She crashed into the table.

Even though she had known that this must happen,

her success was so complete, so overwhelming, that it momentarily appalled her.

Martha Jacques and The Cork had moved with anxious, rapid jerks, like puppets in a nightmare. But their rhythm was all wrong. With their ingrained four-time motor responses strangely modulated by a five-time pattern, the result was inevitably the arithmetical composite of the two: a neural heat, which could activate muscle tissue only when the two rhythms were in phase.

The Cork had hardly begun his frantic, spasmodic squeeze of the trigger when the careening table knocked him backward to the floor, stunned, beside Martha Jacques. It required but an instant for Anna to scurry around and extract the pistol from his numbed fist.

Then she pointed the trembling gun in the general direction of the carnage she had wrought and fought an urge to collapse against the wall.

She waited for the room to stop spinning, for the white, glass-eyed face of Martha Jacques to come into focus against the fuzzy background of the cheap paint-daubed rug. And then the eyes of the woman scientist flickered and closed.

With a wary glance at the weapon muzzle, The Cork gingerly pulled a leg from beneath the table edge. "You have the gun," he said softly. "You can't object if I assist Mrs. Jacques?"

"I *do* object," said Anna faintly. "She's merely unconscious . . . feels nothing. I want her to stay that way for a few minutes. If you approach her or make any unnecessary noise, I will probably kill you. So—both of you must stay here until Grade investigates. I know you have a pair of handcuffs. I'll give you ten seconds to lock yourself to that steam pipe in the corner—hands *behind* you, please."

She retrieved the roll of adhesive patching tape from the floor and fixed several strips across the agent's lips, following with a few swift loops around the ankles to prevent him stamping his feet.

A moment later, her face a damp mask, she closed

the door leisurely behind her and stood there, breathing deeply and searching the room for Grade.

He was standing by the studio entrance, staring at her fixedly. When she favoured him with a glassy smile, he simply shrugged his shoulders and began walking slowly toward her.

In growing panic her eyes darted about the room. Bell and Ruy Jacques were leaning over the phono, apparently deeply absorbed in the racing clangour of the music. She saw Bell nod a covert signal in her direction, but without looking directly at her. She tried not to seem hurried as she strolled over to join them. She knew that Grade was now walking toward them and was but a few steps away when Bell lifted his head and smiled.

"Everything all right?" said the psychogeneticist loudly.

She replied clearly: "Fine. Mrs. Jacques and a Security man just wanted to ask some questions." She drew in closer. Her lips framed a question to Bell: "Can Grade hear?"

Bell's lips formed a soft, nervous guttural: "No. He's moving off toward the dressing room door. If what I suspect happened behind that door is true, you have about ten seconds to get out of here. And then you've got to hide." He turned abruptly to the artist. "Ruy, you've got to take her down into the Via. Right now—*immediately*. Watch your opportunity and lose her when no one is looking. It shouldn't be too hard in that mob."

Jacques shook his head doubtfully. "Martha isn't going to like this. You know how strict she is on etiquette. I think there's a very firm statement in *Emily Post* that the host should never, never, never walk out on his guests before locking up the liquor and silverware. Oh, well, if you insist."

"TELL ya what the professor's gonna do, ladies and gentlemen. He's gonna defend not just one paradox. Not just two. But seventeen! In the space of one short hour, and without repeating himself, and

including one he just thought up five minutes ago: "Security is dangerous".

Ruy frowned, then whispered to Anna: "That was for us. He means Security men are circulating. Let's move on. Next door. They won't look for a woman there."

Already he was pulling her away toward the chess parlour. They both ducked under the For Men Only sign (which she could no longer read), pushed through the hat-wing doors, and walked unobtrusively down between the wall and a row of players. One man looked up briefly out of the corner of his eye as they passed.

The woman paused uneasily. She had sensed the nervousness of the harker even before Ruy, and now still fainter impressions were beginning to ripple over the straining surface of her mind. They were coming from that chess player: from the coins in his pocket; from the lead weights of his chess pieces; and especially from the weapon concealed somewhere on him. The resonant histories of the chess pieces and coins she ignored. They held the encephalographic residua of too many minds. The invisible gun was clearer. There was something abrupt and violent, alternating with a more subtle, restrained rhythm. She put her hand to her throat as she considered one interpretation: *Kill—but wait*. Obviously, he'd dare not fire with Ruy so close.

"Rather warm here, too," murmured the artist. "Out we go."

As they stepped out into the street again, she looked behind her and saw that the man's chair was empty.

She held the artist's hand and pushed and jangled after him, deeper into the revelling sea of humanity.

She ought to be thinking of ways to hide, of ways to use her new sensory gift. But another, more imperative train of thought continually clamoured at her, until finally she yielded to a gloomy brooding.

Well, it was true. She wanted to be loved, and she wanted Ruy to love her. And he knew it. Every hit of metal on her shrieked her need for his love.

But—was she ready to love him? No! How could she love a man who lived only to paint that mysterious,

unpaintable scene of the nightingale's death, and who loved only himself? He was fascinating, but what sensible woman would wreck her career for such unilateral fascination? Perhaps Martha Jacques was right, after all.

"So you got him, after all!"

Anna whirled toward the crazy crackle, nearly jerking her hand from Ruy's grasp.

The vendress of love-philters stood leaning against the front centre pole of her tent, grinning toothily at Anna.

While the young woman stared dazedly at her, Jacques spoke up crisply: "Any strange men been around, Violet?"

"Why Ruy," she replied archly, "I think you're jealous. What kind of men?"

"Not the kind that haul you off to the alcoholic ward on Saturday nights. Not city dicks. Security men—quiet—seem slow, but really fast—see everybody—everything."

"Ob, *them*. Three went down the street two minutes ahead of you."

He rubbed his chin. "That's not so good. They'll start at that end of the Via and work up toward us until they meet the patrol behind us."

"Like grains of wheat between the millstones," cackled the crone. "*I knew* you'd turn to crime, sooner or later, Ruy. You were the only tenant I had who paid the rent regular."

"Mart's lawyer did that."

"Just the same, it looked mighty suspicious. You want to try the alley behind the tent?"

"Where does it lead?"

"Cuts back into the Via, at White Rose Park."

Anna started. "White rose?"

"We were there that first night," said Jacques. "You remember it—big rose-walled cul-de-sac. Fountain. Pretty, but not for us, not now. Has only one entrance. We'll have to try something else."

The psychiatrist said hesitantly: "No, wait."

For some moments she had been struck by the sinister

contrast in this second descent into the Via and the irresponsible gaiety of that first night. The street, the booths, the laughter seemed the same, but really weren't. It was like a familiar musical score, subtly altered by some demoniac hand, raised into some harsh and fatalistic minor key. It was like the second movement of Tchaikovsky's *Romeo and Juliet*: all the bright promises of the first movement were here, but repetition had transfigured them into frightful premonitions.

She shivered. That second movement, that echo of destiny, was sweeping through her in ever faster tempo, as though impatient to consummate its assignation with her. Come safety, come death, she must yield to the pattern of repetition.

Her voice had a dream-like quality: "Take me again to the White Rose Park."

"What! Talk sense! Out here in the open you may have a chance."

"But I *must* go there. Please, Ruy. I think it's something about a white rose. Don't look at me as though I were crazy. Of course I'm crazy. If you don't want to take me, I'll go alone. But I'm going."

His hard eyes studied her in speculative silence, then he looked away. As the stillness grew, his face mirrored his deepening introspection. "At that, the possibilities are intriguing. Martha's stooges are sure to look in on you. But will they be able to see you? Is the hand that wields the pistol equally skilled with the brush and palette? Unlikely. Art and Science again. Pointilist school versus police school. A good one on Martha—if it works. Anna's dress is green. Complement of green is purple. Violet's dress should do it."

"My dress?" cried the old woman. "What are you up to, Ruy?"

"Nothing, luscious. I just want you to take off one of your dresses. The outer one will do."

"Sir!" Violet began to sputter in barely audible gasps.

Anna had watched all this in vague detachment, accepting it as one of the man's daily insanities. She had no idea what he wanted with a dirty old purple dress,

but she thought she knew how she could get it for him, while simultaneously introducing another repetitive theme into this second movement of her hypothetical symphony.

She said: "He's willing to make you a fair trade, Violet."

The spluttering stopped. The old woman eyed them both suspiciously. "Meaning what?"

"He'll drink one of your love potions."

The leathery lips parted in amazement. "*I'm agreeable, if he is, but I know he isn't. Why, that scamp doesn't love any creature in the whole world, except maybe himself.*"

"And yet he's ready to make a pledge to his beloved," said Anna.

The artist squirmed. "I like you, Anna, but I won't be trapped. Anyway, it's all nonsense. What's a glass of acidified water between friends?"

"The pledge isn't to me, Ruy. It's to a Red Rose."

He peered at her curiously. "Oh? Well, if it will please you . . . All right, Violet, but off with that dress before you pour up."

Why, wondered Anna, do I keep thinking his declaration of love to a red rose is my death sentence? It's moving too fast. Who, what—is The Red Rose? The Nightingale dies in making the white rose red. So *she*—or I—can't be The Red Rose. Anyway, the Nightingale is ugly, and the Rose is beautiful. And why must The Student have a Red Rose? How will it admit him to his mysterious dance?

"Ah, Madame De Medici is back." Jacques took the glass and purple bundle the old woman put on the table. "What are the proper words?" he asked Anna.

"Whatever you want to say."

His eyes, suddenly grave, looked into hers. He said quietly: "If ever The Red Rose presents herself to me, I shall love her forever."

Anna trembled as he upended the glass.

A little later they slipped into the Park of the White Roses. The buds were just beginning to open, and thousands of white floreate eyes blinked at them in the harsh artificial light. As before, the enclosure was empty, and silent, save for the chattering splashing of its single fountain.

Anna abandoned a disconnected attempt to analyse the urge that had brought her here a second time. It's all too fatalistic, she thought, too involved. If I've entrapped myself, I can't feel bitter about it. "Just think," she murmured aloud, "in less than ten minutes it will all be over, one way or the other."

"Really? But where's my red rose?"

How could she even *consider* loving this jeering beast? She said coldly: "I think you'd better go. It may be rather messy in here soon." She thought of how her body would look, sprawling, misshapen, uglier than ever. She couldn't let him see her that way.

"Oh, we've plenty of time. No red rose, eh? Hmm. It seems to me, Anna, that you're composing yourself for death prematurely. There really is that little matter of the rose to be taken care of first, you know. As The Student, I must insist on my rights."

What made him be this way? "Ruy, please . . ." Her voice was trembling, and she was suddenly very near to tears.

"There, dear, don't apologise. Even the best of us are thoughtless at times. Though I must admit, I never expected such lack of consideration, such poor manners, in you. But then, at heart, you aren't really an artist. You've no appreciation of form." He began to untie the bundled purple dress, and his voice took on the argumentative dogmatism of a platform lecturer. "The perfection of form, of technique, is the highest achievement possible to the artist. When he subordinates form to subject matter, he degenerates eventually into a hoot-fick, a scientist, or, worst of all, a Man with a Message. Here, catch!" He tossed the gaudy garment at Anna, who accepted it in rebellious wonder.

Critically, the artist eyed the nauseating contract of

the purple and green dresses, glanced momentarily toward the semi-circle of white-huddled wall beyond, and then continued. "There's nothing like a school-within-a-school to squeeze dry the dregs of form. And whatever their faults, the pointilists of the impressionist movement could depict colour with magnificent depth of chroma. Their palettes held only the spectral colours, and they never mixed them. Do you know why the Seines of Seurat are so brilliant and luminous? It's because the water is made of dots of pure green, blue, red and yellow, alternating with white in the proper proportion." He motioned with his hand, and she followed as he walked slowly on around the semi-circular gravel path. "What a pity Martha isn't here to observe our little experiment in tricolour stimulus. Yes, the scientific psychologists finally gave arithmetical vent to what the pointilists knew long before them—that a mass of points of any three spectral colours—or of one colour and its complementary colour—can be made to give any imaginable hue simply by varying their relative proportion."

Anna thought back to that first night of the street dancers. So *that* was why his green and purple polka dot academic gown had first seemed white!

At his gesture, she stopped and stood with her humped back barely touching the mass of scented huds. The arched entrance was a scant hundred yards to her right. Out in the Via an ominous silence seemed to be gathering. The Security men were probably roping off the area, certain of their quarry. In a minute or two, perhaps sooner, they would be at the archway, guns drawn.

She inhaled deeply and wet her lips.

The man smiled. "You hope I know what I'm doing, don't you? So do I."

"I think I understand your theory," said Anna, "but I don't think it has much chance of working."

"Tush, child." He studied the vigorous play of the fountain speculatively. "The pigment should never harangue the artist. You're forgetting that there isn't really such a colour as white. The pointilists knew how to simulate white with alternating dots of primary

colours long before the scientists learned to spin the same colours on a disc. And those old masters could even make white from just two colours: a primary and its complementary colour. Your green dress is our primary; Violet's purple dress is its complementary. Funny, mix 'em as pigments into a homogenous mass, and you get brown. But daub 'em on the canvas side by side, stand back the right distance, and they blend into white. All you have to do is hold Vi's dress at arm's length, at your side, with a strip of rosebuds and green leaves looking out between, and you'll have that white rose you came here in search of."

She demurred: "But the angle of visual interruption won't be small enough to blend the colours into white, even if the police don't come any nearer than the archway. The eye sees two objects as one only when the visual angle between the two is less than sixty seconds of arc."

"That old canard doesn't apply too strictly to colours. The artist relies more on the suggestibility of the mind rather than on the mechanical limitations of the retina. Admittedly, if our lean-jawed friends stared in your direction for more than a fraction of a second, they'd see you not as a whitish blur, but as a woman in green holding out a mass of something purple. But they aren't going to give your section of the park more than a passing glance." He pointed past the fountain toward the opposite horn of the semi-circular path. "I'm going to stand over *there*, and the instant someone sticks his head in through the archway, I'm going to start walking. Now, as every artist knows, normal people in western cultures absorb pictures from left to right, because they're *laevo-dextro* readers. So our agent's first glance will be toward you, and then his attention will be momentarily distracted by the fountain in the centre. And before he can get back to you, I'll start walking, and his eyes will have to come on to me. His attentive transition, of course, must be sweeping and imperative, yet so smooth, so subtle, that he will suspect no control. Something like Alexander's painting, *Lady on a Couch*, where the converging stripes of the lady's robe carry

the eye forcibly from the lower left margin to her face at the upper right."

Anna glanced nervously toward the garden entrance, then whispered entreatingly. "Then you'd better go. You've got to be beyond the fountain when they look in."

He sniffed. "All right, I know when I'm not wanted. That's the gratitude I get for making you into a rose."

"I don't care a tinker's damn for a *white* rose. Scat!"

He laughed, then turned and started on around the path.

As Anna followed the graceful stride of his long legs, her face began to write in alternate bitterness and admiration. She groaned softly. "You—*fiend!* You gorgeous, egotistical, insufferable, unattainable FIEND! You aren't elated because you're saving my life; *I* am just a blotch of pigment in your latest masterpiece. *I hate you!*"

He was past the fountain now, and nearing the position he had earlier indicated.

She could see that he was looking toward the archway. She was afraid to look there.

Now he must stop and wait for his audience.

Only he didn't. His steps actually hastened.

That meant . . .

The woman trembled, closed her eyes, and froze into a paralytic stupor through which the crunch of the man's sandals filtered as from a great distance, muffled, mocking.

And then, from the direction of the archway, came the quiet scraping of more footsteps.

In the next split second she would know life or death.

But even now, even as she was sounding the iciest depths of her terror, her lips were moving with the clear insight of imminent death. "No, I don't hate you. I love you, Ruy. I have loved you from the first."

At that instant a blue-hot ball of pain began crawling slowly up within her body, along her spine, and then outward between her shoulder blades, into her spinal hump. The intensity of that pain forced her slowly to

her knees and pulled her head back in an invitation to scream.

But no sound came from her convulsing throat.

It was unendurable, and she was fainting.

The sound of footsteps died away down the Via. At least Ruy's ruse had worked.

And as the mounting anguish spread over her back, she understood that all sound had vanished with those retreating footsteps, forever, because she could no longer hear, nor use her vocal chords. She had forgotten how, but she didn't care.

For her hump had split open, and something had flopped clumsily out of it, and she was drifting gently outward into blackness.

THE glum face of Ruy Jacques peered out through the studio window into the night-awakening Via.

Before I met you, he brooded, loneliness was a magic, ecstatic blade drawn across my heart strings; it healed the severed strands with every heat, and I had all that I wanted save what I had to have—the Red Rose. My search for that Rose alone matters! I must believe this. I must not swerve, even for the memory of you, Anna, the first of my own kind I have ever met. I must not wonder if they killed you, nor even care. They must have killed you . . . It's been three weeks.

Now I can seek the Rose again. Onward into loneliness.

He sensed the nearness of familiar metal behind him. "Hello, Martha," he said, without turning. "Just get here?"

"Yes. How's the party going?" Her voice seemed carefully expressionless.

"Fair. You'll know more when you get the liquor bill."

"Your hallet opens tonight, doesn't it?" Still that studied tonelessness.

"You know damn well it doesn't." His voice held no rancour. "La Tanid took your bribe and left for Mexico. It's just as well. I can't abide a prima ballerina who'd rather eat than dance." He frowned slightly. Every

hit of metal on the woman was singing in secret elation. She was thinking of a great triumph—something far beyond her petty victory in wrecking his opening night. His searching mind caught hints of something intricate, but integrated, completed—and deadly. Nineteen equations. The Jacques Rosette. Sciomnia.

"So you've finished your toy," he murmured. "You've got what you wanted, and you think you've destroyed what I wanted."

Her reply was harsh, suspicious. "How did you know, when not even Grade is sure? Yes, my weapon is finished. I can hold in one hand a thing that can obliterate your whole Via in an instant. A city, even a continent, would take but a little longer. Science versus Art! Bah! This concrete embodiment of biophysics is the answer to your puerile Renaissance—your precious feather-bed world of music and painting! You and your kind are helpless when I and my kind choose to act. In the final analysis Science means *force*—the ability to control the minds and bodies of men."

The shimmering surface of his mind was now catching the faintest wisps of strange, extraneous impressions, vague and disturbing, and which did not seem to originate from metal within the room. In fact, he could not be sure they originated from metal at all.

He turned to face her. "How can Science control all men when it can't even control individuals—Anna van Tuyt, for example?"

She shrugged her shoulders. "You're only partly right. They failed to find her, but her escape was pure accident. In any event, she no longer represents any danger to me or to the political group that I control. Security has actually dropped her from their shoot-on-sight docket."

He cocked his head slightly and seemed to listen. "You haven't, I gather."

"You flatter her. She was never more than a pawn in our little game of Science versus Art. Now that she's off the board, and I've announced checkmate against you, I can't see that she matters."

"So Science announces checkmate? Isn't that a bit premature? Suppose Anna shows up again, with or without the conclusion of her hallet score? Suppose we find another prima? What's to keep us from holding *The Nightingale and the Rose* tonight, as scheduled?"

"Nothing," replied Martha Jacques coolly. "Nothing at all, except that Anna van Tuyl has probably joined your former prima at the South Pole by this time, and anyway, a new ballerina couldn't learn the score in the space of two hours, even if you found one. If this wishful thinking comforts you, why, pile it on!"

Very slowly Jacques put his wine glass on the nearby table. He washed his mind clear with a shake of his satyrish head, and strained every sense into receptivity. Something was being etched against that slurred background of laughter and clinking glassware. Then he sensed—or heard—something that brought tiny beads of sweat to his forehead and made him tremble.

"What's the matter with you?" demanded the woman. As quickly as it had come, the chill was gone.

Without replying, he strode quickly into the centre of the studio.

"Fellow revellers!" he cried. "Let us prepare to double, nay, *re-double* our merriment!" With sardonic satisfaction he watched the troubled silence spread away from him, faster and faster, like ripples around a plague spot.

When the stillness was complete, he lowered his head, stretched out his hand as if in horrible warning, and spoke in the tense spectral whisper of Poe's Roderick Usher:

"*Madmen! I tell you that she now stands without the door!*"

Heads turned; eyes bulged toward the entrance.

There, the door knob was turning slowly.

The door swung in, and left a cloaked figure framed in the doorway.

The artist started. He had been certain that this must be Anna.

It *must* be Anna, yet it could not be. The once frail,

cruelly bent body now stood superbly erect beneath the shelter of the cloak. There was no hint of spinal deformity in this woman, and there were no marring lines of pain about her faintly smiling mouth and eyes, which were fixed on his. In one graceful motion her hands reached up beneath the cloak and set it back on her shoulders. Then, after an almost instantaneous *demi-plie*, she floated twice, like some fragile flower dancing in a summer breeze, and stood before him *sur les pointes*, with her cape billowing and fluttering behind her in mute encore.

Jacques looked down into eyes that were dark fires. But her continued silence was beginning to disturb and irritate him. He responded to it almost by reflex, refusing to admit to himself his sudden enormous happiness: "A woman without a tongue! By the gods! Her sting is drawn!" He shook her by the shoulders, roughly, as though to punish this fault in her that had drawn the familiar acid to his mouth.

Her arms moved up, cross-fashioned, and her hands covered his. She smiled, and a harp-arpeggio seemed to wing across his mind, and the tones rearranged themselves into words, like images on water suddenly smooth:

"Hello again, darling. Thanks for being glad to see me."

Something in him collapsed. His arms dropped and he turned his head away. "It's no good, Anna. Why'd you come back? Everything's falling apart. Even our ballet. Martha bought out our prima."

Again that lilting cascade of tones in his brain: "I know, dear, but it doesn't matter. I'll sub beautifully for La Tanid. I know the part perfectly. And I know the Nightingale's death song, too."

"Hab!" he laughed harshly, annoyed at his exhibition of discouragement and her ready sympathy. He stretched his right leg into a mocking *pointe tendue*. "Marvellous! You have the exact amount of drah clumsiness that we need in a Nightingale. And as for the death song, why of course you and you alone know how that ugly little bird feels when"—his eyes were fixed on her mouth in sudden, startled suspicion, and he finished the rest of

the sentence inattentively, with no real awareness of its meaning—"when she dies on the thorn."

As he waited, the melody formed, vanished, and reformed and resolved into the strangest thing he had ever known: "What you are thinking is true. My lips do not move. I cannot talk. I've forgotten how, just as we both forgot how to read and write. But even the plainest nightingale can sing, and make the white rose red."

This was Anna transfigured. Three weeks ago he had turned his back and left a diffident disciple to an uncertain fate. Confronting him now was this dark angel bearing on her face the luminous stamp of death. In some manner that he might never learn, the gods had touched her heart and body, and she had borne them straightway to him.

He stood, musing in alternate wonder and scorn. The old urge to jeer at her suddenly rose in his gorge. His lips contorted, then gradually relaxed, as an indescribable elation began to grow within him.

He could thwart Martha yet!

He leaped to the table and shouted: "Your attention, friends! In case you didn't get all this, we've found a *hallerina*! The curtain rises tonight on our première performance, as scheduled!"

Over the clapping and cheering, Dorran, the orchestra conductor, shouted: "Did I understand that Dr. van Teyl has finished the Nightingale's death song? We'll have to omit that tonight, won't we? No chance to rehearse . . ."

Jacques looked down at Anna for a moment. His eyes were very thoughtful when he replied: "She says it won't be omitted. What I mean is, keep that thirty-eight rest sequence in the death scene. Yes, do that, and we shall see . . . what we shall see . . ."

"Thirty-eight rests as presently scored, then?"

"Yes. All right, boys and girls. Let's be on our way. Anna and I will follow shortly."

NOW it was a mild evening in late June, in the time of the full blooming of the roses, and the Via floated in a heady, irresistible tide of attar. It got into the tongues of the children and lifted their laughter and shouts an octave. It stained the palettes of the artists along the sidewalks, so that, despite the bluish glare of the artificial lights, they could paint only in delicate crimsons, pinks, yellows and whites. The petalled current swirled through the side-shows and eternally new exhibits and gave them a veneer of perfection; it eddied through the canvas flap of the vendress of love philters and erased twenty years from her face. It brushed a scented message across the responsive mouths of innumerable pairs of lovers, blinding them to the appreciative gaze of those who stopped to watch them.

And the lovely dead petals kept fluttering through the introspective mind of Ruy Jacques, clutching and whispering. He brushed their skittering dance aside and considered the situation with growing apprehension. In her recurrent Dreams, he thought, Anna had always awakened just as the Nightingale began her death song. But now she knew the death song. So she knew the Dream's end. Well, it must not be so bad, or she wouldn't have returned. Nothing was going to happen, not really. He shot the question at her: There was no danger any more, was there? Surely the ballet would be a superb success? She'd be enrolled with the immortals.

Her reply was grave, yet it seemed to amuse her. It gave him a little trouble; there were no words for its exact meaning. It was something like "Immortality begins with death."

He glanced at her face uneasily. "Are you looking for trouble?"

"Everything will go smoothly."

After all, he thought, she believes she has looked into the future and has seen what will happen.

"The Nightingale will not fail The Student," she added with a queer smile. "You'll get your Red Rose."

"You can be plainer than that," he muttered.

"Secrets . . . secrets . . . Why all this you're-too-young-to-know business?"

But she laughed in his mind, and the enchantment of that laughter took his breath away. Finally he said: "I admit I don't know what you're talking about. But if you're about to get involved in anything on my account, forget it. I won't have it."

"Each does the thing that makes him happy. The Student will never be happy until he finds the Rose that will admit him to his Dance. The Nightingale will never be happy until the Student holds her in his arms and thinks her as lovely as a Red Rose. I think we may both get what we want."

He growled: "You haven't the faintest idea what you're talking about."

"Yes I have, especially right now. For ten years I've urged people not to inhibit their healthy inclinations. At the moment I don't have any inhibitions at all. It's a wonderful feeling. I've never been so happy, I think. For the first and last time in my life, I'm going to kiss you."

Her hand tugged at his sleeve. As he looked down into that enchanted face, he knew that this night was hers, that she was privileged in all things, and that whatever she willed must yield to her.

They had stopped at the temporarily-erected stage-door. She rose *sur les pointes*, took his face in her palms, and like a hummingbird drinking her first nectar, kissed him on the mouth.

A moment later she led him into the dressing-room corridor.

He stifled a confused impulse to wipe the back of his hand across his lips. "Well . . . well, just remember to take it easy. Don't try to be spectacular. The artificial wings won't take it. Canvas stretched on duralite and piano wire calls for *adagio*. A fast pirouette, and they're ripped off. Besides, you're out of practice. Control your enthusiasm in Act I, or you'll collapse in Act II. Now, run on to your dressing room. Cue in five minutes!"

THERE is a faint, yet distinct anatomical difference in the foot of the man and that of the woman, which keeps him earthbound, while permitting her, after long and arduous training, to soar *sur les pointes*. Owing to the great and varied beauty of the arabesques open to the ballerina poised on her extended toes, the male danseur at one time existed solely as a shadowy *porteur*, and was needed only to supply unobtrusive support and assistance in the exquisite *enchainements* of the ballerina. Iron muscles in leg and torso are vital in the danseur, who must help maintain the illusion that his whirling partner is made of fairy gossamer, seeking to wing skyward from his restraining arms.

All this flashed through the incredulous mind of Ruy Jacques as he whirled in a double *fouette* and followed from the corner of his eye the grey figure of Anna van Tuyl, as, wings and arms aflutter, she pirouetted in the second enchainement of Act I, away from him and toward the *maitre de ballet*.

It was all well enough to give the illusion of flying, of alighting apparently weightless, in his arms—that was what the audience loved. But that it could ever *really* happen—that was simply impossible. Stage wings—things of grey canvas and duralite frames—couldn't subtract a hundred pounds from one hundred and twenty.

And yet . . . it had seemed to him that she had actually flown.

He tried to pierce her mind—to extract the truth from the hits of metal about her. In a gust of fury he dug at the metal outline of those remarkable wings.

In the space of seconds his forehead was drenched in cold sweat, and his hands were trembling. Only the fall of the curtain on the first act saved him as he stumbled through his exit *entrechat*.

What had Matt Bell said? "To communicate in his new language of music, one may expect our man of the future to develop specialised membranous organs, which, of course, like the tongue, will have dual functional uses,

possibly leading to the conquest of time as the tongue has conquered space."

Those wings were not wire and metal, but flesh and blood.

He was so absorbed in his ratiocination that he failed to become aware of an acutely unpleasant metal radiation behind him until it was almost upon him. It was an intricate conglomeration of matter, mostly metal, resting perhaps a dozen feet behind his back, showering the lethal presence of his wife.

He turned with nonchalant grace to face the first tangible spawn of the Sciomnia formula.

It was simply a black metal box with a few dials and buttons. The scientist held it lightly in her lap as she sat at the side of the table.

His eyes passed slowly from it to her face, and he knew that in a matter of minutes Anna van Tuyt—and all Via Rosa beyond her—would soon be soot floating in the night wind.

Martha Jacques' face was sublime with bate. "Sit down," she said quietly.

He felt the blood leaving his cheeks. Yet he grinned with a fair show of geniality as he dropped into the chair. "Certainly. I've got to kill time somehow until the end of Act III."

She pressed a button on the box surface.

His volition vanished. His muscles were locked, immobile. He could not breathe.

Just as he was convinced that she planned to suffocate him, her finger made another swift motion toward the box, and he sucked in a great gulp of air. His eyes could move a little, but his larynx was still paralysed.

Then the moments began to pass, endlessly, it seemed to him.

The table at which they sat was on the right wing of the stage. The woman sat facing into the stage, while his back was to it. She followed the preparations of the troupe for Act II with moody, silent eyes, he with straining ears and metal-empathic sense.

Only when he heard the curtain sweeping across the

street-stage to open the second act did the woman speak.

"She is beautiful. And so graceful with those piano-wire wings, just as if they were part of her. I don't wonder she's the first woman who ever really interested you. Not that you really *love* her. You'll never love anyone."

From the depths of his paralysis he studied the etched bitterness of the face across the table. His lips were parched, and his throat a desert.

She thrust a sheet of paper at him, and her lip curled. "Are you still looking for that rose? Search no further, my ignorant friend. There it is—Sciomnia, complete, with its nineteen sub-equations."

The lines of unreadable symbols dug like nineteen relentless harpoons ever deeper into his twisting, racing mind.

The woman's face grimaced in fleeting despair. "Your own wife solves Sciomnia and you condescend to keep her company until you go on again at the end of Act III. I wish I had a sense of humour. All I knew was to paralyse your spinal column. Oh, don't worry. It's purely temporary. I just didn't want you to warn her. And I know what torture it is for you not to be able to talk." She bent over and turned a knurled knob on the side of the black steel box. "There, at least you can whisper. You'll be completely free after the weapon fires."

His lips moved in a rapid slur. "Let us bargain, Martha. Don't kill her. I swear never to see her again."

She laughed, almost gaily.

He pressed on. "But you have all you really want. Total fame, total power, total knowledge, the body perfect. What can her death and the destruction of the Via give you?"

"Everything."

"Martha, for the sake of all humanity to come, don't do this thing! I know something about Anna van Tuyl that perhaps even Bell doesn't—something she has concealed very adroitly. That girl is the most precious creature on earth!"

"It's precisely because of that opinion—which I do not necessarily share—that I shall include her in my general destruction of the Via." Her mouth slashed at him: "Oh, but it's wonderful to see you squirm. For the first time in your miserable thirty years of life you really want something. You've got to crawl down from that ivory tower of indifference and actually plead with me, whom you've never even taken the trouble to despise. You and your damned art. Let's see it save her now!"

The man closed his eyes and breathed deeply. In one rapid, complex surmise, he visualised an *enchânement* of postures, a *par de deux* to be played with his wife as an unwitting partner. Like a skilled chess player, he had analysed various variations of her probable responses to his gambit, and he had every expectation of a successful climax. And therein lay his hesitation, for success meant his own death.

Yet, he could not eradicate the idea from his mind. Even at this moment he believed himself intrigued more by the novel, if macabre, possibilities inherent in the theme rather than its superficial altruism. While seeming to lead Martha through an artistic approach to the murder of Anna and the Via, he could, in a startling, off-key climax, force her to kill him instead. It amused him enormously to think that afterward, she would try to reduce the little comedy to charts and graph paper in an effort to discover how she had been hypnotised.

It was the first time in his life that he had courted physical injury. The emotional sequence was new, a little heady. He could do it; he need only be careful about his timing.

After hurling her challenge at him, the woman had again turned morose eyes downstage, and was apparently absorbed in a grudging admiration of the second act. But that couldn't last long. The curtain on Act II would be her signal.

And there it was, followed by the muffled roar of applause. He must stall her through most of Act III, and then . . .

He said quickly: "We still have a couple of minutes

before the last act begins, where the Nightingale dies on the thorn. There's no hurry. You ought to take time to do this thing properly. Even the best assassinations are not purely a matter of science. I'll wager you never read De Quincy's little essay on murder as a fine art. No? You see, you're a neophyte, and could do with a few tips from an old hand. You must keep in mind your objects: to destroy both the Via and Anna. But mere killing won't be enough. You've got to make *me* suffer too. Suppose you shoot Anna when she comes on at the beginning of Act III. Only fair. The difficulty is that Anna and the others will never know what hit them. You don't give them the opportunity to bow to you as their conqueror."

He regarded her animatedly. "You can see, can't you, my dear, that some extraordinarily difficult problems in composition are involved?"

She glared at him, and seemed about to speak.

He continued hastily: "Not that I'm trying to dissuade you. You have the basic concept, and despite your lack of experience, I don't think you'll find the problem of technique insuperable. Your prelude was rather well done: freezing me *in situ*, as it were, to state your theme simply and without adornment, followed immediately by variations of dynamic and suggestive portent. The finale is already implicit; yet it is kept at a disciplined arm's length while the necessary structure is formed to support it and develop its stern message."

She listened intently to him, and her eyes were narrow. The expression on her face said: "Talk all you like. This time, you won't win."

Somewhere beyond the flimsy building-board stage wing he heard Dorran's musicians tuning up for Act III.

His dark features seemed to grow even more earnest, but his voice contained a perceptible burble. "So you've blocked in the introduction and the climax. A beginning and an end. The *real* problem comes now: how much, and what kind—of a middle? Most beginning murderesses would simply give up in frustrated bafflement. A few would shoot the moment Anna floats into the white

rose garden. In my opinion, however, considering the wealth of material inherent in your composition, such abbreviation would be inexcusably primitive and garish—if not actually vulgar."

Martha Jacques blinked, as though trying to break through some indescribable spell that was being woven about her. Then she laughed shortly. "Go on. I wouldn't miss this for anything. Just when *should* I destroy the *Via*?"

The artist sighed. "You see? Your only concern is the *result*. You completely ignore the *manner* of its accomplishment. Really, Mart, I should think you'd show more insight into your first attempt at serious art. Now please don't misunderstand me, dear. I have the warmest regard for your spontaneity and enthusiasm: to be sure, they're quite indispensable when dealing with hackneyed themes, but headlong eagerness is not a substitute for method, or for art. We must search out and exploit subsidiary themes, intertwine them in subtle counterpoint with the major motifs. The most obvious minor theme is the ballet itself. That ballet is the loveliest thing I've ever seen or heard. Nevertheless, you can give it a power, a dimension, that even Anna wouldn't suspect possible, simply by blending it contrapuntally into your own work. It's all a matter of firing at the proper instant." He smiled engagingly. "I see that you're beginning to appreciate the potentialities of such unwitting collaboration."

The woman studied him through heavy-lidded eyes. She said slowly: "You are a great artist—and a loathsome beast."

He smiled still more amiably. "Kindly restrict your appraisals to your fields of competence. You haven't, as yet, sufficient background to evaluate me as an artist. But let us return to your composition. Thematically, it's rather pleasing. The form, pacing, and orchestration are irreproachable. It is adequate. And its very adequacy condemns it. One detects a certain amount of diffident imitation and over-attention to technique common to artists working in a new medium. The over-cautious

sparks of genius aren't setting us aflame. The artist isn't getting enough of his own personality into the work. And the remedy is as simple as the diagnosis: the artist must penetrate his work, wrap it around him, give it the distilled, unique essence of his heart and mind, so that it will blaze up and reveal his soul, even through the veil of unidiomatic technique."

He listened a moment to the music outside. "As Anna wrote her musical score, a hiatus of thirty-eight rests precedes the moment the nightingale drops dying from the thorn. At the start of that silence, you could start to run off your nineteen sub-equations in your little tin box, audio-Fourier style. You might even route the equations into the loudspeaker system, if your gadget is capable of remote control."

For a long time she appraised him calculatingly. "I finally think I understand you. You hoped to unnerve me with your savage, over-accentuated satire, and make me change my mind. So you aren't a beast, and even though I see through you, you're even a greater artist than I at first imagined."

He watched as the woman made a number of adjustments on the control panel of the black box. When she looked up again, her lips were drawn into hard purple ridges.

She said: "But it would be too great a pity to let such art go to waste, especially when supplied by the author of 'Twinkle, twinkle, little star'. And you will indulge an amateur musician's vanity if I play *my* first Fourier composition *fortissimo*."

He answered her smile with a fleeting one of his own. "An artist should never apologise for self-admiration. But watch your cueing. Anna should be clasp ing the white rose thorn to her breast in thirty seconds, and that will be your signal to fill in the first half of the thirty-eight rest hiatus. Can you see her?"

The woman did not answer, but he knew that her eyes were following the ballet on the invisible stage and Dorran's haton, beyond, with fevered intensity.

The music glided to a halt.

"Now!" hissed Jacques.

She flicked a switch on the box.

They listened, frozen, as the multi-throated public address system blared into life up and down the two miles of the Via Rosa.

The sound of Sciomania was chill, metallic, like the cruel crackle of ice heard suddenly in the intimate warmth of an enchanted garden, and it seemed to chatter derisively, well aware of the magic that it shattered.

As it clattered and skirled up its harsh tonal staircase, it seemed to shriek: "Fools! Leave this childish nonsense and follow me! I am Science! I AM ALL!"

And, Ruy Jacques, watching the face of the prophetess of the God of Knowledge, was for the first time in his life aware of the possibility of utter defeat.

As he stared in mounting horror, her eyes rolled slightly upward, as though buoyed by some irresistible inner flame, which the pale translucent cheeks let through.

But as suddenly as they had come, the nineteen chords were over, and then, as though to accentuate the finality of that mocking manifesto, a ghastly aural afterimage of silence began building up around his world.

For a near eternity it seemed to him that he and this woman were alone in the world, that, like some wicked witch, she had, through her cacophonous creation, immutably frozen the thousands of invisible watchers beyond the thin walls of the stage wings.

It was a strange, yet simple thing that broke the appalling silence and restored sanity, confidence, and the will to resist to the man: from somewhere far away, a child whimpered.

Breathing as deeply as his near paralysis would permit, the artist murmured: "Now, Martha, in a moment I think you will hear why I suggested your Fourier broadcast. I fear Science has been had once mo——"

He never finished, and her eyes, which were crystallising into question marks, never fired their bars.

A towering tidal wave of tone was engulfing the Via, apparently of no human source and from no human instrument.

Even he, who had suspected in some small degree what was coming, now found his paralysis once more complete. Like the woman scientist opposite him, he could only sit in motionless awe, with eyes glazing, jaw dropping, and tongue cleaving to the roof of his mouth.

He knew that the heart-strings of Anna van Tuij were one with this mighty sea of song, and that it took its ecstatic timbre from the reverberating volutes of that god-like mind.

And as the magnificent chords poured out in exquisite consonantal sequence, now with a sudden reedy delicacy, now with the radiant gladness of cymbals, he knew that his plan must succeed.

For, chord for chord, tone for tone, and measure for measure, the Nightingale was repeating in her death song the nineteen chords of Martha Jacques' *Sciomnia* equations.

Only now those chords were transfigured, as though some Parnassian composer were compassionately correcting and magically transmuting the work of a dull pupil.

The melody spiralled heavenward on wings. It demanded no allegiance; it hurled no pronouncements. It held a message, but one almost too glorious to be grasped. It was steeped in boundless aspiration, but it was at peace with man and his universe. It sparkled humility, and in its abnegation there was grandeur. Its very incompleteness served to hint at its boundlessness.

And then it, too, was over. The death song was done.

Yes, thought Ruy Jacques, it is the *Sciomnia*, rewritten, recast, and breathed through the blazing soul of a goddess. And when Martha realises this, when she sees how I tricked her into broadcasting her trifling, inconsequential effort, she is going to fire her weapon—at me.

He watched the woman's face go livid, her mouth work in speechless hate.

"You knew!" she screamed. "You did it to humiliate me!"

Jacques began to laugh. It was a nearly silent laughter, rhythmic with mounting ridicule, pitiless in its mockery.

"Stop that!"

But his abdomen was convulsing in rigid helplessness, and tears began to stream down his cheeks.

"I warned you once before!" yelled the woman. Her hand darted toward the black box and turned its long axis toward the man.

Like a period punctuating the rambling, aimless sentence of his life, a ball of blue light burst from a cylindrical hole in the side of the box.

His laughter stopped suddenly. He looked from the box to the woman with growing amazement. He could bend his neck. His paralysis was gone.

She stared back, equally startled. She gasped: "Something went wrong! *You should be dead!*"

The artist didn't linger to argue.

In his mind was the increasingly urgent call of Anna van Tuyl.

DORRAN waved back the awed mass of spectators as Jacques knelt and transferred the faerie body from Bell's arms into his own.

"I'll carry you to your dressing room," he whispered. "I might have known you'd over-exert yourself."

Her eyes opened in the general direction of his face; in his mind came the tinkling of bells: "No . . . don't move me."

He looked up at Bell. "I think she's hurt! Take a look here!" He ran his hands over the seething surface of the wing folded along her side and breast: It was fevered fire.

"I can do nothing," replied the latter in a low voice. "She will tell you that I can do nothing."

"Anna!" cried Jacques. "What's wrong? What happened?"

Her musical reply formed in his mind. "Happened? Sciomnia was quite a thorn. Too much energy for one mind to disperse. Need two . . . three. Three could dematerialise weapon itself. Use wave formula of matter. Tell the others."

"Others? What are you talking about?" His thoughts whirled incoherently.

"Others like us. Coming soon. Bakine, dancing in streets of Leningrad. In Mexico City . . . the poetress Orteza. Many . . . this generation. *The Golden People*. Matt Bell guessed. Look!"

An image took fleeting form in his mind. First it was music, and then it was pure thought, and then it was a crisp strange air in his throat and the tang of something marvellous in his mouth. Then it was gone. "What was that?" he gasped.

"The Zhak symposium, seated at wine one April evening in the year 2437. Probability world. May . . . not occur. Did you recognise yourself?"

"Twenty-four thirty-seven?" His mind was fumbling.

"Yes. Couldn't you differentiate your individual mental contour from the whole? I thought you might. The group was still somewhat immature in the twenty-hundreds. By the fourteenth millenium . . ."

His head reeled under the impact of something titanic. ". . . your associated mental mass . . . creating a star of the M spectral class . . . galaxy now two-thirds terrestrialised . . ."

In his arms her wings stirred uneasily; all unconsciously he stroked the hot membranous surface and rubbed the marvellous bony framework with his fingers. "But Anna," he stammered, "I do not understand how this can be."

Her mind murmured in his. "Listen carefully, Ruy. Your pain . . . when your wings tried to open and couldn't . . . you needed certain psychoglandular stimulus. When you learn how to"—here a phrase he could not translate—"afterwards, they open . . ."

"When I learn—*what*?" he demanded. "What did you say I had to know, to open my wings?"

"One thing. The one thing . . . must have . . . to see the Rose."

"Rose—rose—*rose!*" he cried in near exasperation. "All right, then, my dutiful Nightingale, how long must I

wait for you to make this remarkable Red Rose? I ask you, where is it?"

"Please . . . not just yet . . . in your arms just a little longer . . . while we finish ballet. Forget yourself, Ruy. Unless . . . leave prison . . . own heart . . . never find the Rose. Wings never unfold . . . remain a mortal. Science . . . isn't all. Art isn't . . . one thing greater . . . Ruy! I can't prolong . . ."

He looked up wildly at Bell.

The psychogeneticist turned his eyes away heavily. "Don't you understand? She has been dying ever since she absorbed that Sciomniac blast."

A faint murmur reached the artist's mind. "So you couldn't learn . . . poor Ruy . . . poor Nightingale . . ."

As he stared stuporously, her dun-coloured wings began to shudder like leaves in an October wind.

From the depths of his shock he watched the fluttering of the wings give way to a sudden convulsive straining of her legs and thighs. It surged upward through her blanching body, through her abdomen and chest, pushing her blood before it and out into her wings, which now appeared more purple than grey.

To the old woman standing at his side, Bell observed quietly: "Even *homo superior* has his death struggle, his rigor mortis."

The vendress of love philters nodded with anile sadness. "And she knew the answer . . . lost . . . lost . . ."

And still the blood came, making the wing membranes thick and taut.

"Anna!" shrieked Ruy Jacques. "You *can't* die. I won't let you! I love you! *I love you!*"

He had no expectation that she could still sense the images in his mind, nor even that she was still alive.

But suddenly, like stars shining their brief brilliance through a rift in storm clouds, her lips parted in a gay smile. Her eyes opened and seemed to bathe him in an intimate flow of light. It was during this momentary illumination, just before the lips solidified into their final enigmatic mask, that he thought he heard, as from

a great distance, the opening measures of Weber's *Invitation to the Dance*.

At this moment the conviction formed in his numbed understanding that her loveliness was now supernal, that greater beauty could not be conceived or endured.

But even as he gazed in stricken wonder, the blood-gorged wings curled slowly up and out, enfolding the ivory breast and shoulders in blinding scarlet, like the petals of some magnificent rose.

THE END



Reviews

by the Editor

Our only fiction title this month comes from Doubleday and Co. Inc. at \$2.75 and is a novel by Isaac Asimov called *Currents of Space*. Being an Asimov, there is a good deal of politics in the story, but this time it does not intrude too much. Indeed, it is there as a necessary and interesting background to the swift action, poised suspense, and first-class characterisation that will make this book something of a favourite. The hero is psychoprobed because he knows too much. It takes him most of the book to get his memory back and when he does all hell is let loose on the smug money-grabbers who turn their backs on a planet's impending doom. You'll like this story.



Across the Space Frontier is something we have all been waiting for, and the fact that it costs 21s. (from Sidgwick and Jackson, 44 Museum Street, London, W.C.1.) should be no excuse for not buying it. This is an expanded version of the *Caffier's* space-flight issue. Profusely illustrated with drawings that make you gasp, the book is a symposium by Joseph Kaplan, von Braun, Heinz Haber, Willy

Ley, Oscar Schachter and Fred Whipple. It deals with most aspects of space flight in a complete but thoroughly intelligible manner. Mathematics do not come into it. There are a few graphs, but these are self-explanatory. Artwork is by Chesley Bonestell, Fred Freeman and Rolf Klep. It is superb and puts all our British artists to shame. One can find odd technical details to quarrel with, but to do so would be reminiscent of Chauvin. The Americans have their own ideas about space flight, as they should. And, who knows, they may be right.



For those interested in the physical side of chemistry, Heinemann (99 Great Russell Street, London, W.C.1.) have just brought out an excellent *Intermediate Physical Chemistry* at 11s. 6d. The book is by J. C. Giblio and was prepared with the expressed intention of reducing mathematical treatment to the standard of those whose maths learning stopped at ordinary G.C.E. and for those whose main interests lie in biology. As one who had to plough dully and painfully through older books on this subject, I can thoroughly recommend this easy, exciting and very up-to-date treatise.

A new philosophy of the universe has been propounded in short form by J. G. Bird (21 Park Road, London, N.8.) in a 3s. booklet called *The Comprehensible Universe*. The author is preparing a larger book which will embrace many more facts. As with all such theories, there are points with which everyone can find disagreement. A review of this length is not sufficient to do justice to this theory, and we merely note it so that you may make up your own minds. Our considered opinion will be given in an article in a future issue.

The Chemical Basis of Human Development by Professor E. G. Hallsworth, is published by the University of Nottingham at 1s. 6d. It is a perfect example of circumlocution. Out of some ten thousand words, about five hundred deal with the subject of the title. The rest is a rather dull account of soil acidity, rainfall measurements and the heavy elements required by plants. This was the Professor's Inaugural Lecture. It would almost seem as though he gave the wrong one—and nobody noticed.



It has been reported from a researcher at California Institute of Technology that recent work in experimental physics has invalidated many of Einstein's conclusions following on the theory of relativity. Since this theory made such a big impression on physics, it will be interesting to see what effect the overthrow of the theory in its present form might have.



PROJECTILES...

*** STAR LETTER ***

I'd like to comment on the January *Authentic*. The cover was really nice; I like the wording, but the picture isn't all that good. Better than your past efforts, though. To my mind the title would look better in block rather than in its present form. And praise be for the title down the spine together with the issue number. Happy days! At last we find a decent back cover with no more cries for me to stop smoking or buy lucky charms. Keep that up. And it's nice to see you've got some decent authors for a change. The stories are well up to their standard. Glad to see you've left Forry's column in and the rest of the articles. I do think that projectiles could be extended and I would make a cry for more intelligent letters (present company excluded!). You can have more improvement by dropping that serial. It isn't worth printing. And I see that "Joan the Wad" still reigns supreme on the inside covers. Drop her and everybody will be happy.

All in all, a real improvement that's been long overdue. Here's one new subscriber!

JAMES RATIGAN,
96 Perry Rise,
Forest Hill, S.E. 23.

As the writer of this starred letter, Mr. Ratigan receives six non-fiction books in appreciation. A similar award is made each month.

SCIENCE v. FICTION

I'd like to congratulate you on your excellent mag. SF Handbook is a welcome feature. I have only one complaint to make: let's have more science and less fiction. Could any of your readers let me have Nos. 1 to 10 and No. 23?

A. FOBIG,
223 van Hoeden Street,
Capital Park,
Pretoria, S. Africa.

Do you mean science features or science in the stories? The former is coming along and the latter is already there. No doubt one of our readers will oblige you with the back numbers. Write again, please.

LOCAL TALENT

I am heartily delighted with the improvements scheduled for '53. These changes have come at just the right time, for the publication over here of two American magazines will mean pretty hot competition for our own sf mags. However, the inclusion in *Authentic* of top-flight authors will certainly keep the mag. at the forefront. While I am very pleased at the prospect of reading material by the big names, I hope you will not deviate from your policy of bringing along the local talent. I still find 4sJ's column most interesting, and I hope that the Handbook feature will be retained or even enlarged.

P. W. CARTER,

191 Fratton Road,

Fratton, Portsmouth.

Your letters are a pleasure to receive, Mr. Carter, and you can see that we have listened to your complaints. The local talent will be appearing in next month's issue.

ALARMED

I was disturbed about the serial, but I was genuinely alarmed at the announcement that you intend to include short stories in your magazine and to make use of illustrations. Anyone can go to town and fill his arms with sf mags. that deal in novelettes and short stories, which depend on garrish illos of scantily-clad women and spine-

chilling monsters for their public. I have always advocated *Authentic* as the embodiment of all the best in sf. You have gained the respect and popularity you owe bold through your single novel system. I believe you will find it hard not to lapse into sensationalism, which is the only thing that ultimately satisfies short-story fans.

BRIAN BELL,

25 Houston Park,

Belfast.

Get it quite clear, Brian, that we are continuing to publish a long novel. The shorts are there for free. If you don't want to read them, you've still got the novel just as you had it before. But do read them. We'll steer clear of sensationalism and monsters, never fear. And there'll be very few damsels. Anyway, you'll be pleased to know we are dropping serials.

BARGAIN

If all that's promised is fulfilled, *Authentic* will be a bargain at 1s. 6d. The magazine offers better value for money than any other at the present time, and for these issues I'd be prepared to pay 2s. (though I hope that won't be necessary!).

J. ASHCROFT,

Manor House Farm,

Habhall,

Nr. Ormskirk, Lancs.

That's the way to talk, Mr. Ashcroft. You're a man of

perception. And don't be afraid that we'll raise our price. We know we're giving better value than 2s. magazines and that's the way we are going to keep it. Remember, too, that it doesn't cost any more to subscribe to *Authentic*. We are alone in that respect.

BOOK FORM

With regard to the Handbook, would it be possible to publish a complete list of these items in book form?

G. COLLISON, A/C2 2518182,
Hut A/4, 12 Site,
R.A.F., 90 M/U, Warton,
Nr. Preston, Lancs.

Could be. But only if a lot of people want it. All those in favour of the idea should write to us immediately.

NO MISTAKE

In your Handbook you quote Newton's second Law of Motion thus: "The rate of change of momentum of a body is proportional to the external force." Surely the word *velocity* should be substituted for momentum. Momentum varies with the mass of a body, not the external force. After all, the equation reads momentum = velocity \times mass.

G. H. DOWNES,
155 Victoria Way,
Charlton, S. E. 7.

Newton thought otherwise. He could have reasoned this way: we are dealing here not with a change in momentum, but with a rate of change of momentum. And

the rate of change of momentum = mass \times acceleration. Acceleration, of course, is rate of change of velocity. The Second Law of Motion is concerned with acceleration, not velocity. Putting the word velocity into the Law would make it meaningless. Any elementary physics textbook will explain this at greater length.

JUNIOR FANS

I am delighted with the wonderful books on sf that you are now producing, your covers could not be better, keep up the fine work.

I wish to congratulate your author, Bryan Berry, on producing a suprisingly good story, the *Aftermath*, it was a delightful change. If Bryan keeps up like this he will soon be well ahead of all your other sf authors.

I am proud to say that I have so far managed to get 27 other teenagers interested since I started reading sf less than a year ago. I am trying to open a club to all teenagers interested in sf, that is, teenagers everywhere.

All those interested please write to:

Teenagers' S.F. Club,
c/o 12, Diamana Road,
Ladysmith,
Natal,
South Africa.

I would be pleased if you could give my club a mention in your next issue.

VERNON COLLETT,
(address as above)

*We'll, there's your mention, Vernon, and the best wishes of *Authentic* go to present and all future members.*

SELECTED SCIENCE FICTION

The Publishers of *Authentic Science Fiction Monthly* take this opportunity of reminding you that there are still small supplies available of the first two titles in their Selected Science Fiction Library Series:

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by Bryan Berry

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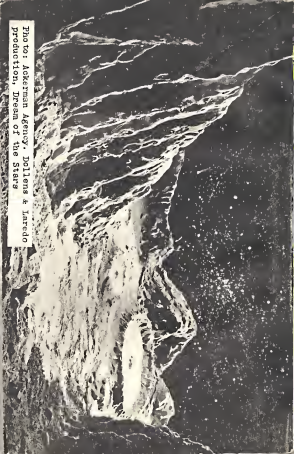
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